Amplify Desmos Math CALIFORNIA

Grade 3

Intervention, Extension, and Investigation Resources

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Extensions (continued)

Mini-Lessons

Unit 1

Mini-Lessons

Name _____

Representing Equal-Groups Situations

ML 1.02

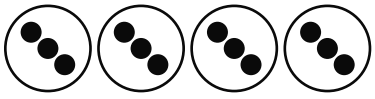
Modeled Review

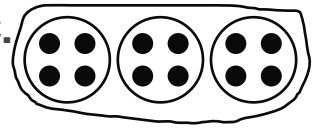
Name: Clare

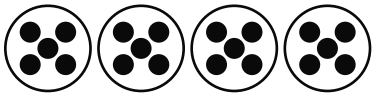
Select the equal-groups drawing that represents the situation.

There are 3 bags. Each bag has 4 grapes.

A. 

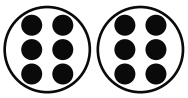
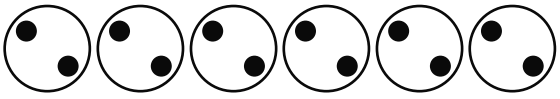
B. 

C. 

D. 

Guided Practice

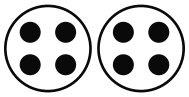
1. Draw a line to match the situation with the equal-groups drawing that represents it.

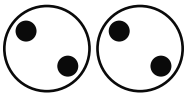
Situation	Equal-Groups Drawing
There are 3 baskets. Each basket has 4 apples.	
Each pond has 6 ducks. There are 2 ponds.	
There are 6 bags. Each bag has 2 toys.	
Each car has 4 wheels. There are 5 cars.	

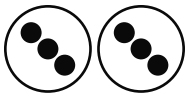
Guided Practice

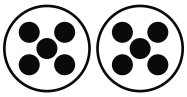
Select the equal-groups drawing that represents the situation.

2. There are 2 trees. Each tree has 2 squirrels.

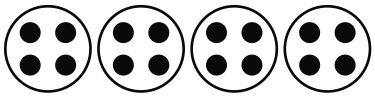
A. 

B. 

C. 

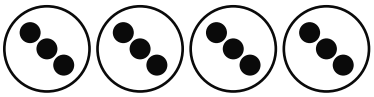
D. 

3. Each dog house has 3 dogs. There are 4 dog houses.

A. 

B. 

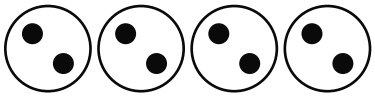
C. 

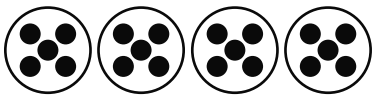
D. 

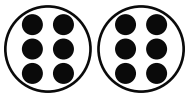
Check

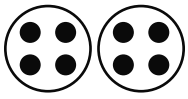
Select the equal-groups drawing that represents the situation.

There are 4 plates. Each plate has 2 apples.

A. 

B. 

C. 

D. 

Name _____

Writing Expressions That Represent Equal-Groups Drawings and Situations

ML 1.03

Modeled Review

Name: Han

Write a multiplication expression to represent the situation or drawing.

There are 4 bowls. Each bowl has 3 oranges.

expression: 4 × 3

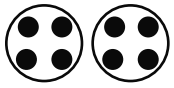
Guided Practice

1. Write a multiplication expression to represent the situation or drawing.

Situation or drawing	Expression
	2 × 3
There are 3 boxes. Each box has 6 crayons.	3 × ____
	____ × ____

Guided Practice

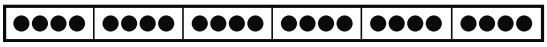
Write a multiplication expression to represent the situation or drawing.

2. 

____ groups

____ in each group

expression: 2 × 4

3. 

____ groups

____ in each group

expression: _____

4. There are 5 fish tanks. Each tank has 4 fish.

____ groups

____ in each group

expression: _____

5. Each bicycle has 2 wheels. There are 7 bicycles.

expression: _____

Check

Write a multiplication expression to represent the situation or drawing.

1. There are 3 tables. Each table has 8 people.

expression: _____

2. 

expression: _____

Name _____

Making Sense of Multiplication Problems

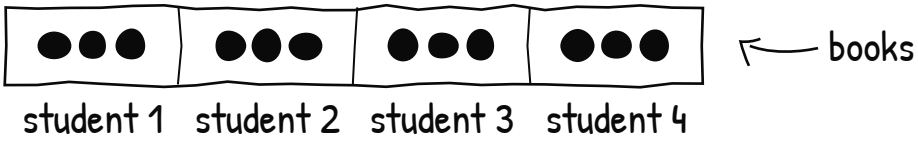
ML 1.04

Modeled Review

Name: Jada

Draw a tape diagram and write an expression that represents the problem.

4 students went to the library. They each borrowed 3 books. How many books did they borrow altogether?



The expression represents 4 equal groups of 3.

expression: 4 × 3

Guided Practice

Complete the tape diagram and statement to represent the problem.

1. Clare, Diego, and Han each borrowed 6 books about snakes. How many books were borrowed altogether?

The expression represents 3 equal groups of 6.

expression: 3 × 6

Guided Practice

Draw a tape diagram and write an expression that represents each situation.

2. There are 5 books each about sharks, whales, and dolphins. How many books are there in all?

The expression represents ____ equal groups of ____.

expression: 3 × ____

3. 10 students in the class borrowed 2 books each for the weekend. How many books did the students in the class borrow?

The expression represents ____ equal groups of ____.

expression: _____

Check

Draw a tape diagram and write an expression that represents the situation.

2 students helped put away 8 books each. How many books did they put away altogether?

The expression represents ____ equal groups of ____.

expression: _____

Name _____

Writing Equations That Represent Equal-Groups Situations

ML 1.05

Modeled Review

Name: Diego

Represent the situation with a multiplication equation, using a ? for the unknown amount.

There are 40 people in the cafeteria. There are 8 tables with the same number of people seated at them. How many people are sitting at each table?

equation: 8 × ? = 40

Guided Practice

1. Represent the situation with a multiplication equation, using a ? to represent the unknown amount.

Situation	Equation
There are 2 fish tanks. Each tank has 5 fish. How many fish are there?	2 × ____ = ?
Jada picked 8 apples. She put 4 in each basket. How many baskets did she have?	____ × 4 = 8
There are 3 equal-sized teams. 12 students are playing altogether. How many students are on each team?	____ × ____ = 12

Guided Practice

2. Represent the situation with a multiplication equation, using a ? to represent the unknown amount.

Situation	Equation
8 students borrowed 2 books each from the library. How many books were borrowed?	
There are 18 books about animals. They are placed in 6 bins with the same number of books in each bin. How many books are in each bin?	
Each table has 5 chairs. There are 30 chairs altogether. How many tables are there?	

Check

Represent the situation with a multiplication equation, using a ? to represent the unknown amount.

There are 4 plates with the same number of bananas on each plate. There are 20 bananas altogether. How many bananas are on each plate?

equation: _____

Name _____

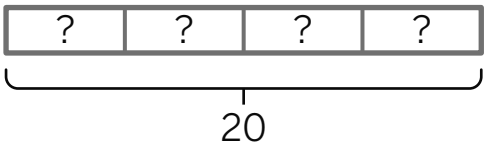
Writing Equations With Unknown Numbers

ML 1.06

Modeled Review

Name: Clare

Write an equation to represent the diagram. Use a ? symbol to represent the unknown value. Determine the unknown value.

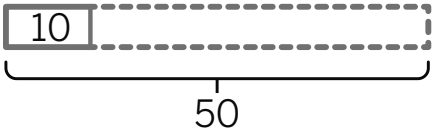
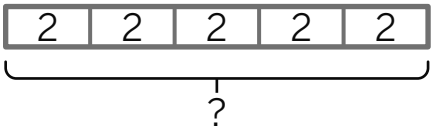


equation: 4 × ? = 20

unknown value: 5

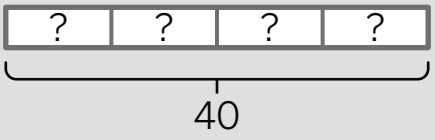
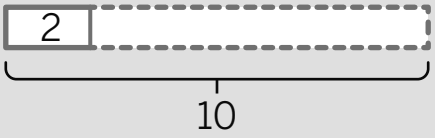
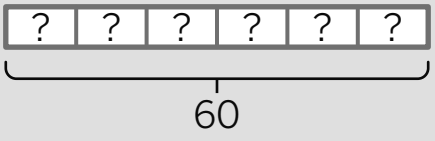
Guided Practice

1. Draw a line to match each diagram or situation with an equation that represents it.

Situation or Diagram	Equation
	5 × 2 = ?
Clare has 3 bags of apples. Each bag has the same number of apples. She has 6 apples altogether.	? × 10 = 50
	3 × ? = 6

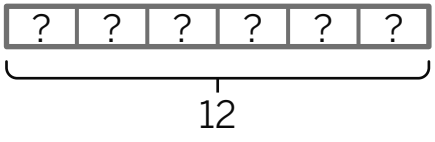
Guided Practice

2. Write an equation to represent the diagram or situation. Use a ? symbol to represent the unknown value. Determine the unknown value.

Diagram or situation	Equation	Unknown value
	4 × ____ = 40	10
There are 5 tables. Each table has 5 students.	____ × ____ = ____	25
		
		

Check

Write an equation to represent the diagram. Use a ? symbol to represent the unknown value. Determine the unknown value.



equation: _____

unknown value: ____

Name _____

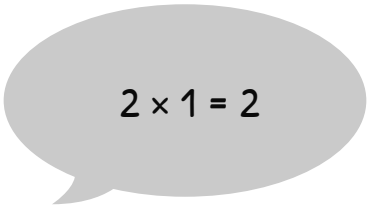
Multiplication Fluency (Factors of 2, 5, and 10)

ML 1.07

Modeled Review

Name: Avery

Use 2s facts to complete the multiplication chart.



×	1	2	3	4
1	↓	2		
2	→ 2	4	6	8
3		6		
4		8		

Guided Practice

1. Use 2s facts to complete the multiplication chart.

×	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Guided Practice

2. Use 5s and 10s facts to complete the multiplication chart.

×	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Check

Determine the product.

1. 2 × 6 = ____

2. 5 × 4 = ____

3. 10 × 3 = ____

4. 5 × 7 = ____

5. 10 × 9 = ____

6. 2 × 8 = ____

Name _____

Representing Equal Group Drawings and Situations With Expressions

ML 1.08

Modeled Review

Name: Priya

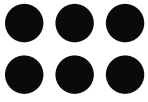
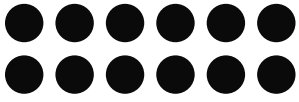
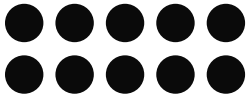
Circle *all* of the expressions that represent the array.

2 rows of 10

A. 10 × 1 **B.** 2 × 10 **C.** 4 × 5 **D.** 10 × 2

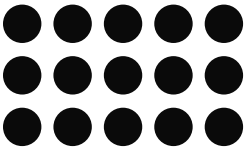
Guided Practice

1. Draw lines from the array to its matching expression.

Array	Expression
	2 × 5
	2 × 3
	6 × 2

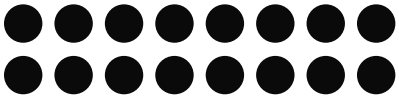
Guided Practice

Circle *all* of the expressions that represent each array.

2. 

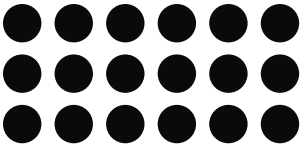
A. 4×4 **B.** 3×5

C. 5×3 **D.** 3×6

3. 

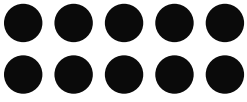
A. 8×2 **B.** 2×6

C. 6×2 **D.** 2×8

4. 

A. 6×3 **B.** 5×4

C. 3×6 **D.** 4×5

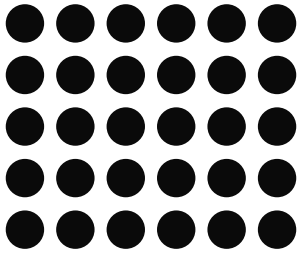
5. 

A. 3×5 **B.** 5×3

C. 5×2 **D.** 2×5

Check

Circle *all* of the expressions that represent each array.



A. 6×5 **B.** 5×6 **C.** 4×8 **D.** 8×4

Name _____

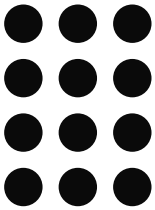
Writing Two Expressions That Represent an Array

ML 1.09

Modeled Review

Name: Eva

Write two expressions that match the array.



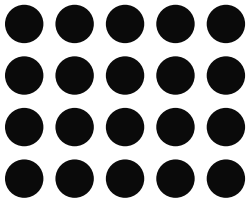
expression 1: 4 × 3

expression 2: 3 × 4

Guided Practice

Circle all expressions that represent the array.

1.



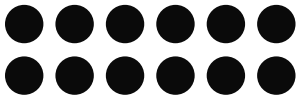
A. 4 × 5

B. 4 × 2

C. 5 × 5

D. 5 × 4

2.



A. 2 × 5

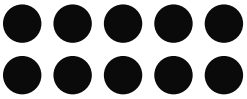
B. 6 × 2

C. 2 × 6

D. 3 × 5

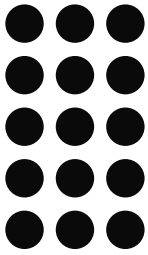
Guided Practice

Write two expressions that represent each array.

3. 

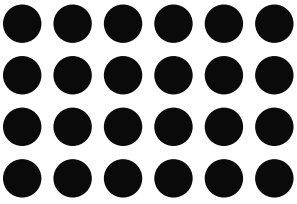
expression 1: 2 × ____

expression 2: 5 × 2

4. 

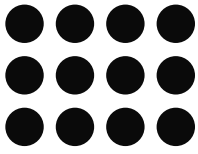
expression 1: 5 × 3

expression 2: ____ × ____

5. 

expression 1: ____ × ____

expression 2: _____

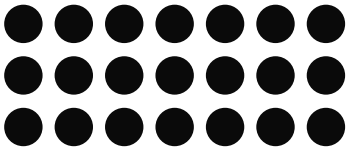
6. 

expression 1: _____

expression 2: _____

Check

Write two expressions that represent the array.



expression 1: _____

expression 2: _____

Name _____

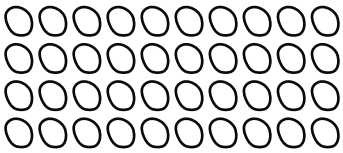
Relating Array Situations to Equations

ML 1.10

Modeled Review

Name: Shawn

Han has a collection of 40 baseball cards set up in an array. There are 4 rows. How many baseball cards are in each row?



equation: 4 × ? = 40

unknown: 10 cards

Guided Practice

Circle the equation that matches the situation.

1. A box has 8 rows of crayons with 5 crayons in each row. How many crayons are in the box?

A. 8 × ? = 40 **B.** ? × 5 = 40

C. 8 × ? = 5 **D.** 8 × 5 = ?

2. There are 20 erasers set up in 5 equal rows. How many erasers are in each row?

A. 4 × 20 = ? **B.** 5 × ? = 4

C. 5 × ? = 20 **D.** 20 × 5 = ?

Guided Practice

Write an equation that represents each situation, using a ? symbol for the unknown number.

3. A box of pencils are arranged into 4 rows and 5 columns. How many pencils are there in the box?

4 × ____ = ____

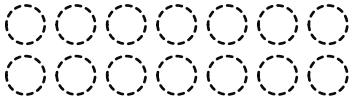
4. There are 16 paint buckets arranged in an array. There are 8 paint buckets in each row. How many rows are there?

____ × ____ = 16

Write an equation using a ? symbol for the unknown. Represent the problem with an array and solve the problem.

5. There are 2 rows of markers in a box with 7 markers in each row. How many markers are in the box?

equation: ____ × ____ = ____



unknown: ____ markers

6. There are 15 glue sticks arranged in an array. There are 3 rows of glue sticks. How many glue sticks are in each row?

equation: _____

unknown: _____

Check

Write an equation using a ? symbol for the unknown. Represent the problem with an array and solve the problem.

The class's paintings are displayed in an array. There are 2 rows with 10 paintings in each row. How many paintings are there altogether?

equation: _____

unknown: _____

Name _____

Solving Multiplication Problems Using Arrays

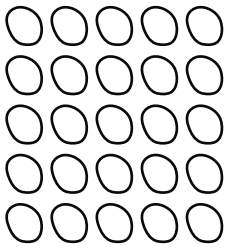
ML 1.11

Modeled Review

Name: Jada

There are 25 books on display.

1. Show how the books can be lined up in an array.



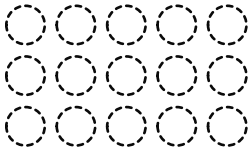
2. Write an equation that represents your array in Problem 1.

equation: 5 x 5 = 25

Guided Practice

Complete the array for each situation. Use counters if it is helpful.

1. Clare has room for 3 rows and needs to seat 15 people.



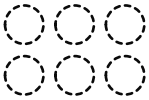
equation: 3 × 5 = 15

2. Han has 4 rows of baseball cards. There are 16 cards.

equation: 4 × 4 = 16

Guided Practice

Help the librarian arrange each set of books in an array. Use counters if it is helpful.

Situation	Array	Equation
There are 6 books about bears in 2 rows.		2 × ____ = 6
There are 16 books about snakes in 2 rows.		2 × ____ = 16
There are 10 books about holidays.		____ × ____ = ____
There are 20 sports books.		

Check

1. There are 12 cards on the table. Show how the cards could be lined up in an array. Use counters if it is helpful.

2. Write an equation to represent your array.

   equation: _____

Name _____

Drawing Picture Graphs

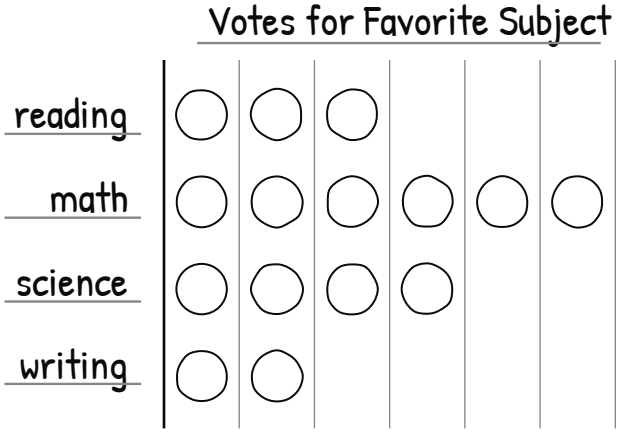
ML 1.12.A

Modeled Review

Name: Dylan

Use the data from the table to complete the picture graph.

Favorite subject	
reading	3
math	6
science	4
writing	2

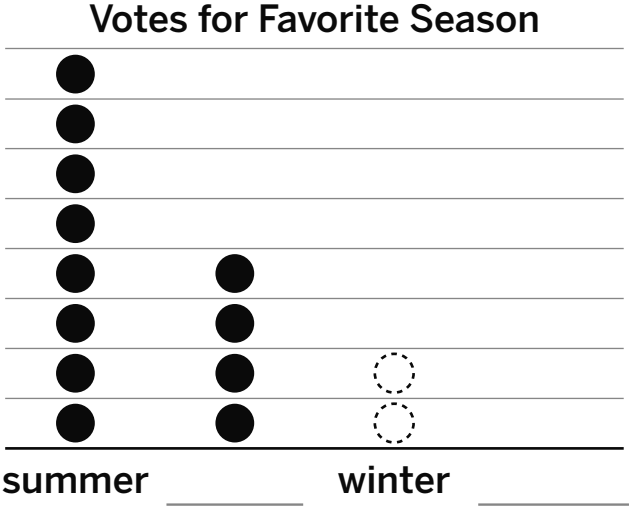


Each ○ represents 1 vote.

Guided Practice

1. Use the data from the table to complete the picture graph.

Favorite season	
summer	8
fall	4
winter	2
spring	5



Each ● represents 1 vote.

Guided Practice

2. Create a picture graph to represent the data in the table.

Favorite fruit	
banana	4
apple	7
orange	3
peach	2

Each ● represents 1 vote.

Check

Create a picture graph to represent the data in the table.

Favorite color	
blue	5
yellow	3
green	8
red	6

Each ● represents 1 vote.

Name _____

Drawing Bar Graphs

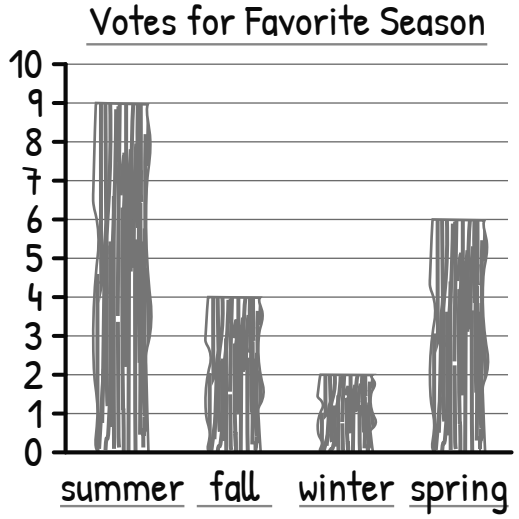
ML 1.12.B

Modeled Review

Name: Santiago

Create a bar graph to represent the data in the table.

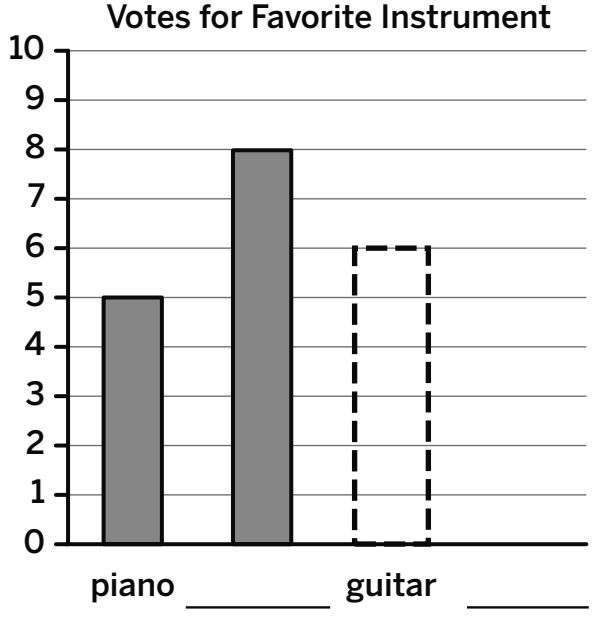
Favorite season	
summer	9
fall	4
winter	2
spring	6



Guided Practice

1. Use the data from the table to complete the bar graph.

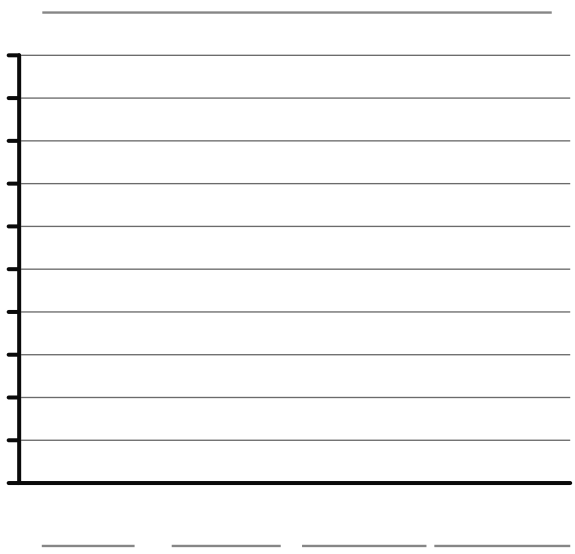
Favorite instrument	
piano	5
drums	8
guitar	6
violin	3



Guided Practice

2. Create a bar graph to represent the data in the table.

Favorite color	
red	4
blue	6
green	10
yellow	3



Check

Create a bar graph to represent the data in the table.

Favorite fruit	
mango	5
orange	7
peach	2
apple	9

Name _____

Reading Scaled Picture Graphs

ML 1.13

Modeled Review

Name: Jada

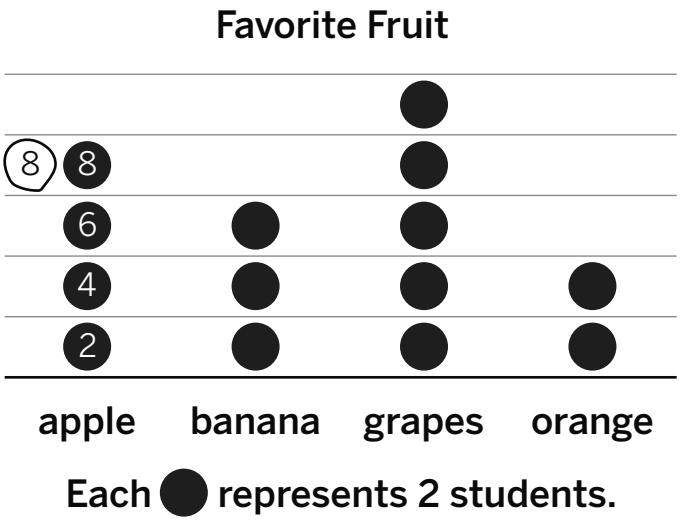
For Problems 1–2, use the picture graph that shows some students' favorite types of fruit.

1. How many students voted for apple?

8 students

2. How many total students are represented by the graph?

28 students



Guided Practice

Use the picture graph about instruments students want to try.

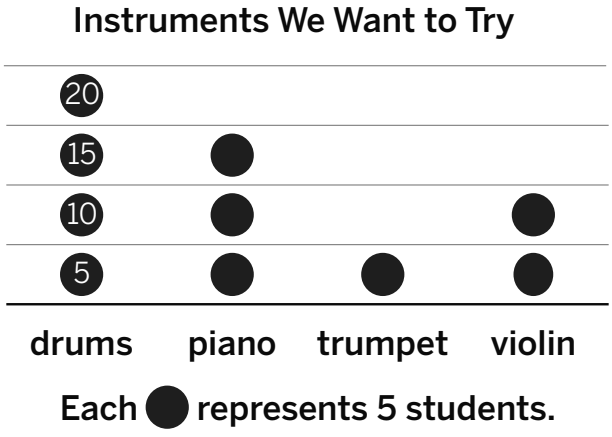
1. How many students want to try each instrument?

drums: 20 students

piano: _____

trumpet: _____

violin: _____



Guided Practice

For Problems 2–4, use the picture graph about the number of people that attended each concert.

2. How many people attended the Grade 3 concert?

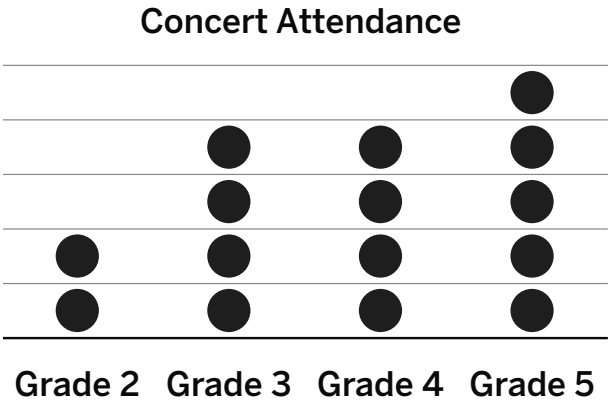
_____

3. How many people attended the Grade 5 concert?

_____

4. How many total people are represented by the graph?

_____



Check

For Problems 1–3, use the picture graph about the pets students have.

1. How many students have a fish?

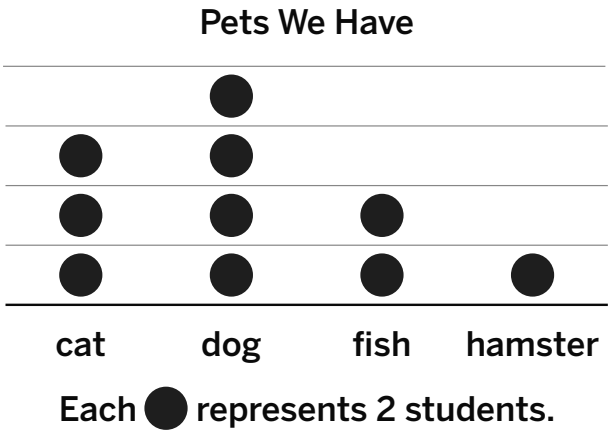
_____

2. How many students have a dog?

_____

3. How many total students are represented by the graph?

_____



Name _____

Creating Scaled Picture Graphs

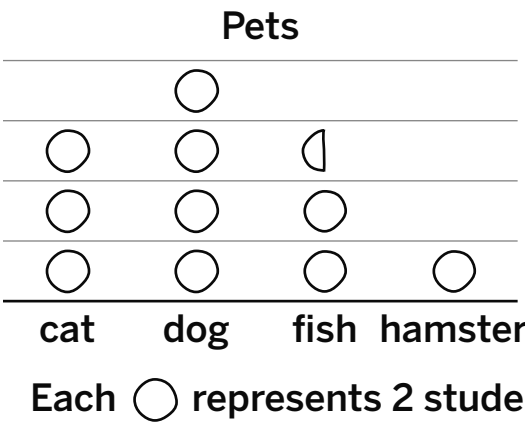
ML 1.14

Modeled Review

Name: Shawn

Use the data in the table to complete the scaled picture graph.

Pet	Number
cat	6
dog	8
fish	5
hamster	2

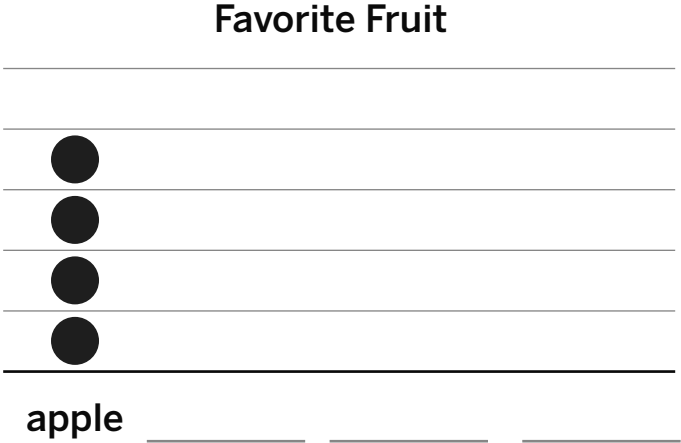


Each ◯ represents 2 students.

Guided Practice

1. The table shows students' favorite types of fruit. Use the table to complete the scaled picture graph.

Fruit	Number
apple	8
banana	6
grapes	10
orange	3



Each ● represents 2 students.

Guided Practice

2. Use the data in the table to complete the scaled picture graph.

Weather	Number of Days
rainy	10
cloudy	20
snowy	5
sunny	25

Each ◯ represents 5 days.

Check

The table shows the after-school clubs students attend. Use the data in the table to complete the scaled picture graph.

Club	Number
yoga	10
chess	8
art	7
running	6

Each ◯ represents 2 students.

Name _____

Creating Scaled Bar Graphs

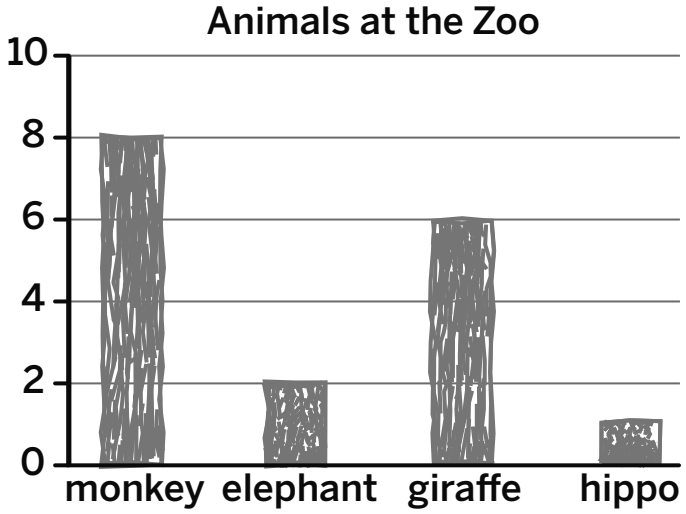
ML 1.15

Modeled Review

Name: Jada

Use the data in the table about animals at the zoo to complete the scaled bar graph.

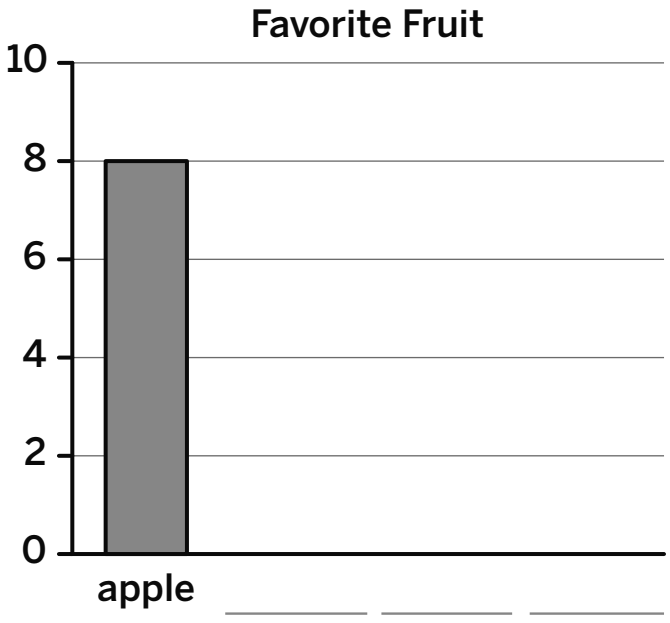
Animals	Number
monkey	8
elephant	2
giraffe	6
hippo	1



Guided Practice

1. Use the data in the table about favorite types of fruit to complete the scaled bar graph.

Fruit	Number
apple	8
banana	6
grapes	10
orange	3



Guided Practice

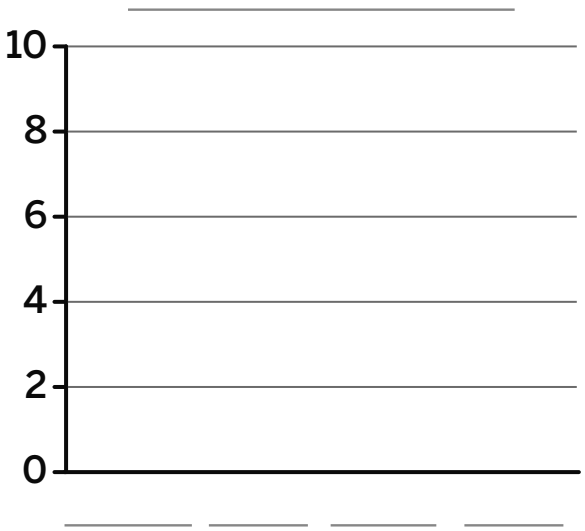
2. Use the data in the table about third graders in after-school clubs to complete the scaled bar graph.

Club	Number
yoga	10
chess	8
art	7
running	6

Check

Use the data in the table about pets to complete the scaled bar graph.

Pet	Number
snake	1
cat	6
fish	4
dog	10



Name _____

Choosing a Scale

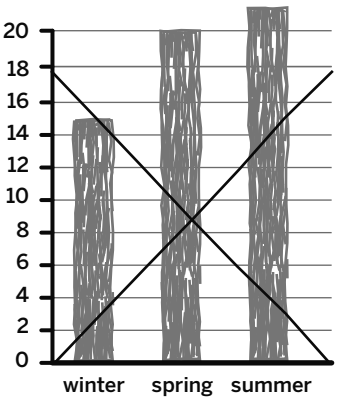
ML 1.16

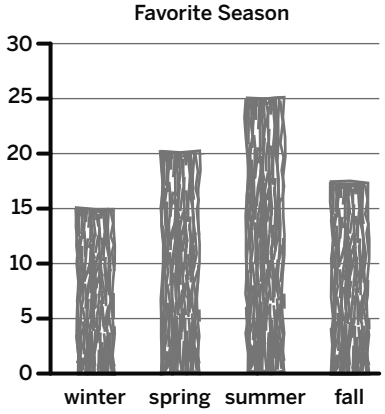
Modeled Review

Name: Diego

Use the information from the table to create a scaled bar graph.

Favorite season	Number of students
winter	15
spring	20
summer	25
fall	18





Guided Practice

1. Jada, Shawn, and Priya want to make a bar graph to represent the data in the table.

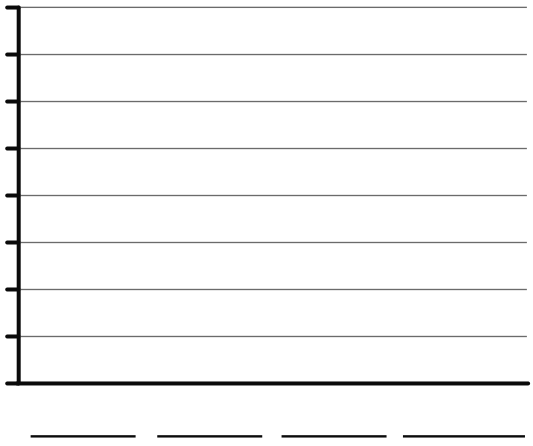
Favorite fruit	Number of students
apple	24
banana	22
grapes	40
orange	13

- Jada says the scale of the bar graph should be 2.
- Shawn says the scale of the bar graph should be 5.
- Priya says the scale of the bar graph should be 10.

Discuss: Do you agree with Jada, Shawn, or Priya?

Guided Practice

2. Use the scale you chose in Problem 1 to create a scaled bar graph to represent students' favorite types of fruit.



Check

1. Use the information in the table to create a scaled bar graph. Choose a scale of 2, 5, or 10.

Pets	Number
dog	45
cat	35
fish	25
snake	10

2. Why did you choose the scale that you did?

Name _____

Solving One-Step Interpretation Questions

ML 1.17

Modeled Review

Name: Clare

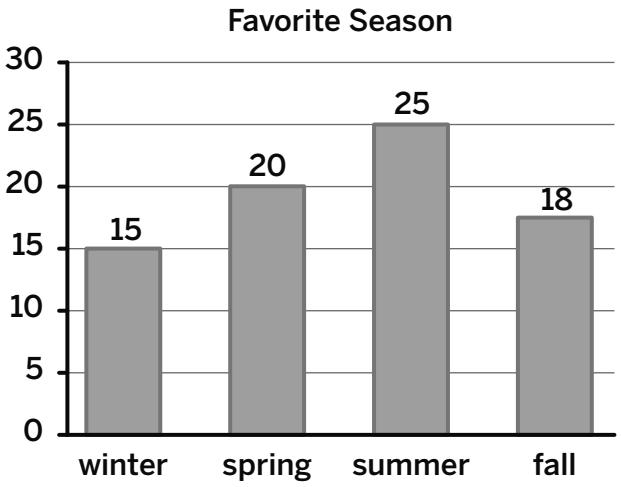
Use the bar graph to answer the questions.

1. How many students chose winter or spring as their favorite season?

15 + 20 = 35 students

2. How many *fewer* students chose fall than summer?

25 – 18 = 7 students



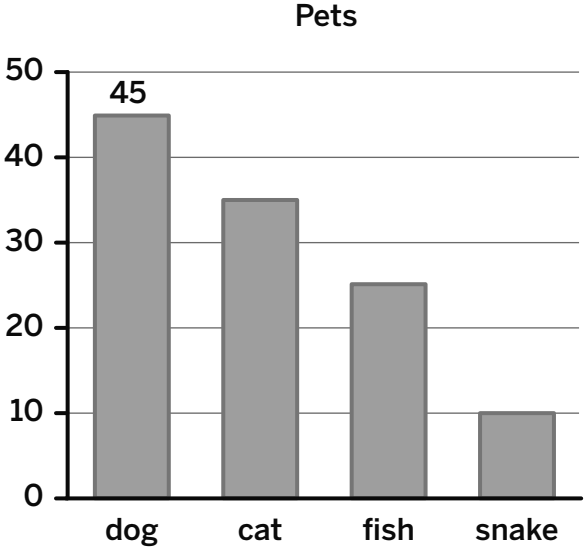
Guided Practice

Use the bar graph to answer the question.

1. How many dogs and cats are there?

45 + ____ = ____

answer: ____ dogs and cats



Guided Practice

Use the bar graph to answer the questions.

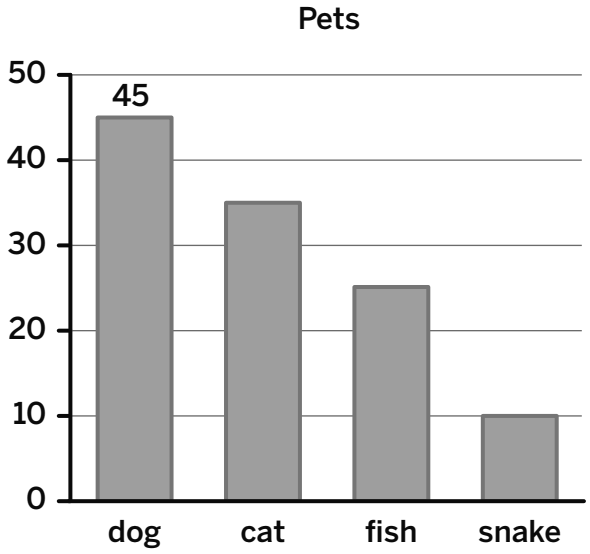
2. How many *more* cats are there than snakes?

____ – ____ = ____

answer: ____ cats

3. How many *fewer* fish are there than dogs?

answer: _____

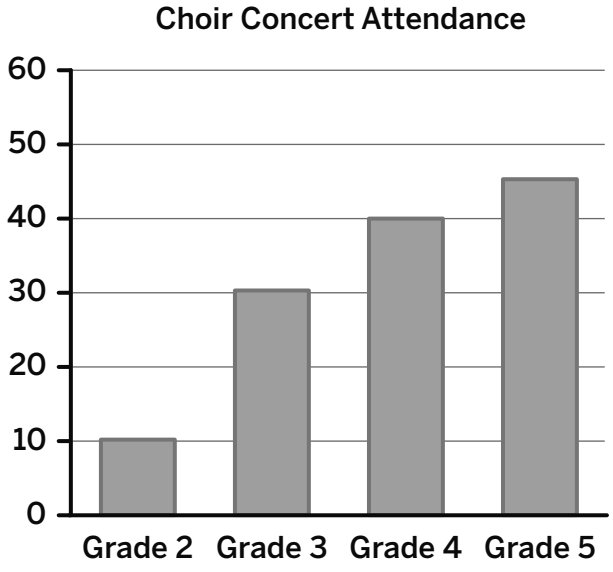


Check

Use the bar graph to answer the question.

How many *fewer* people attended the Grade 3 concert than the Grade 5 concert?

answer: _____



Name _____

Solving Two-Step Interpretation Questions

ML 1.18

Modeled Review

Name: Priya

Use the bar graph to answer the questions.

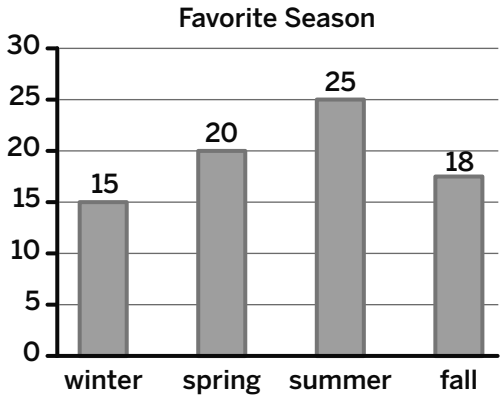
1. How many *fewer* students chose winter than summer?

   25 – 15 = 10 students

2. How many *fewer* students chose winter than summer and spring combined?

   25 + 20 = 45

   45 – 15 = 30 students



Guided Practice

Use the bar graph to answer the question.

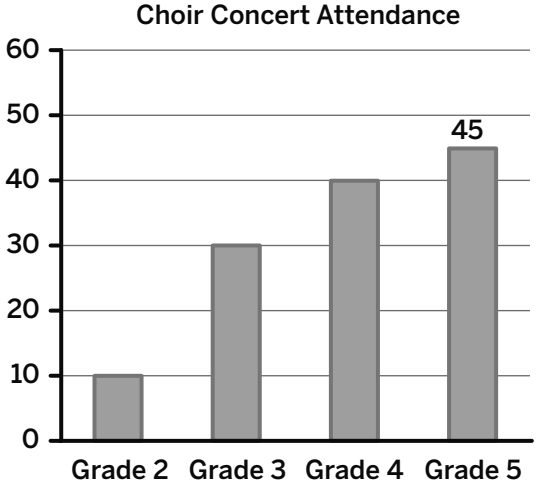
1. How many more people attended the Grade 5 concert than the Grade 2 and Grade 3 concerts combined?

step 1:

_____	+	_____	=	_____
Grade 2		Grade 3		Total Grades 2 and 3

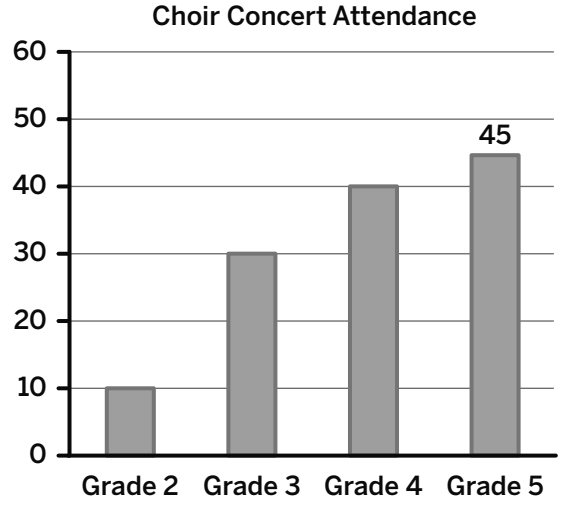
step 2:

45	–	_____	=	_____
Grade 5		Total Grades 2 and 3		more people



Guided Practice

Use the bar graph to answer the questions.



2. How many *fewer* people attended the Grade 3 concert than the Grade 4 and Grade 5 concerts combined?

answer: ____ people

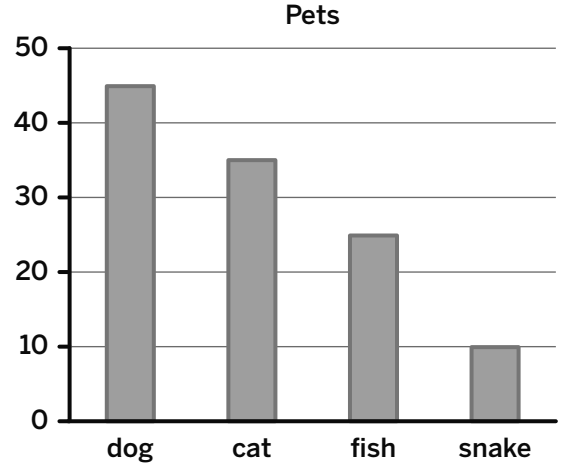
3. How many *more* people attended the Grade 3 and Grade 4 concerts than the Grade 2 concert?

answer: _____

Check

Use the bar graph to answer the question.

How *many* more dogs are there than fish and snakes combined?



answer: _____

Unit 2

Mini-Lessons

Name _____

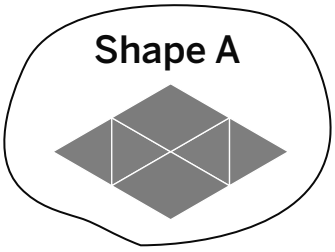
Using Pattern Blocks to Compare Area

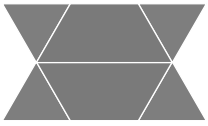
ML 2.02

Modeled Review

Name: Jada

1. Circle the shape that has the smaller area.





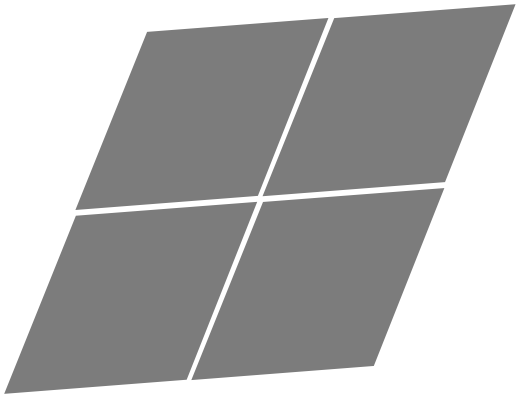
I can use triangles to cover both shapes. Then I can count the triangles to compare their areas.

2. Consider Shapes A and B. Explain how you determined which shape has a smaller area.

I used a triangle to compare. Shape A can be made using 8 triangles. Shape B can be made with 10 triangles.

Guided Practice

1. Circle the shape that has the larger area by using triangles as a common unit.



Number of triangles: ____ **Number of triangles:** ____

Guided Practice

2. Circle the shape that has the larger area.

Shape A

Shape B

3. Consider Shapes A and B. Explain how you determined which shape has a larger area.

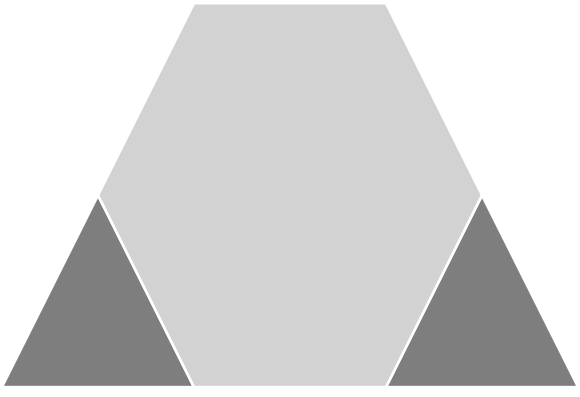
_____

_____

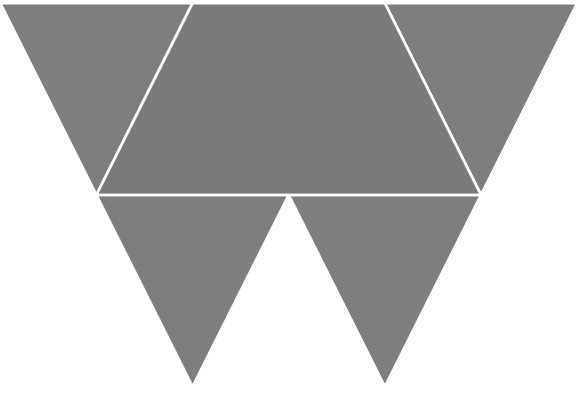
Check

1. Circle the shape that has the smaller area.

Shape A



Shape B



2. Consider Shapes A and B. Explain how you determined which shape has a smaller area.

_____

_____

Name _____

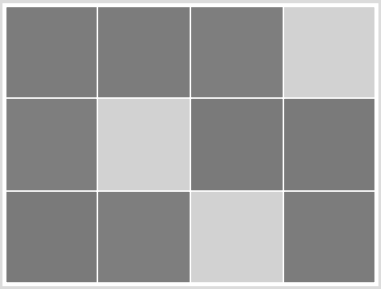
Using Square Tiles to Determine Area

ML 2.03

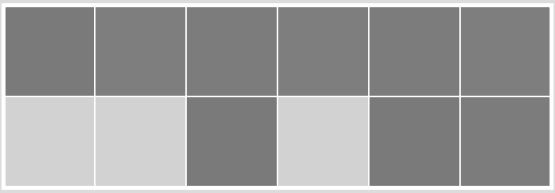
Modeled Review

Students were asked to use tiles to build a rectangle with an area of 12 square units.

Priya's work



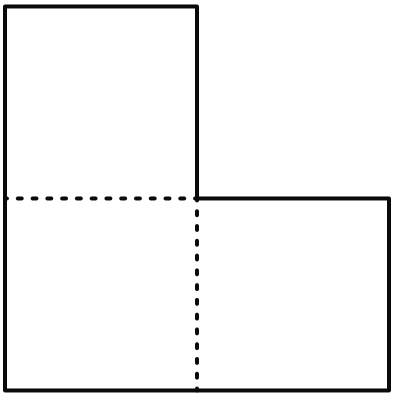
Diego's work



Guided Practice

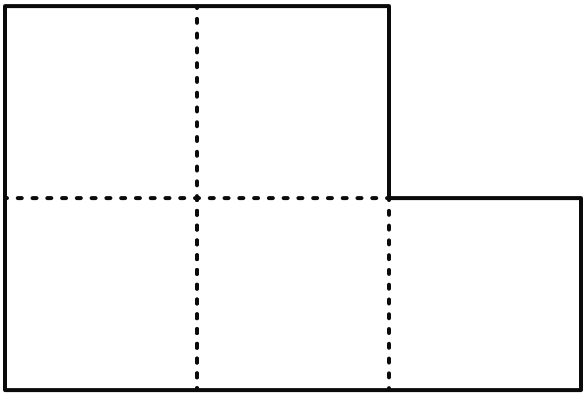
Use square tiles to determine the area of the figure.

1.



area: _____ square units

2.

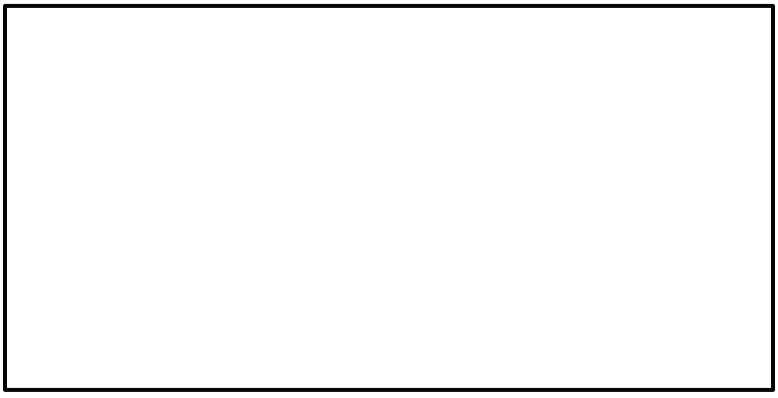


area: _____

Guided Practice

Use square tiles to determine the area of the figure.

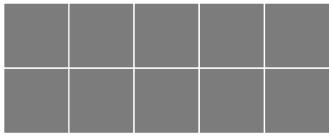
3.



area: _____

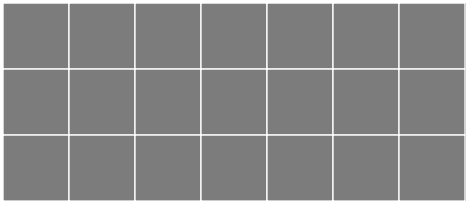
For Problems 4 and 5, determine the area of the rectangle. Each square on the grid has an area of 1 square unit.

4.



area: _____ square units

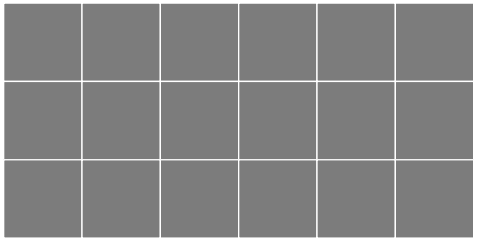
5.



area: _____

Check

Determine the area of the rectangle. Each square on the grid has an area of 1 square unit.



area: _____

Name _____

Selecting the Appropriate Units to Measure Area

ML 2.04

Modeled Review

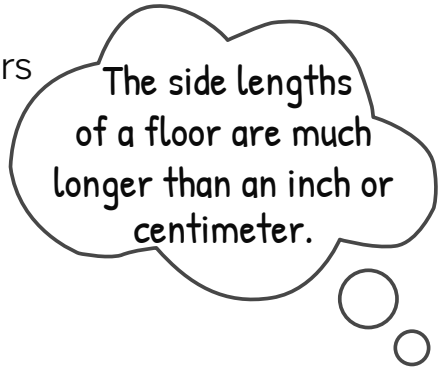
Name: Kai

Match each object with the most appropriate unit of measure for area.

A. classroom floor — square centimeters

B. deck of cards — square inches

C. tablet — square feet



Guided Practice

1. Determine the most appropriate unit of measure for the length of each object. Place a check mark in the correct column.

	Centimeters	Inches	Feet
box of colored pencils		✔	
gym floor			
laptop			
pink eraser			

2. Discuss: Choose an object from the table. Why did you select the unit of measure that you did?

Guided Practice

3. Determine the most appropriate unit of measure for the area of each object. Place a check mark in the correct column.

	Square centimeters	Square inches	Square feet
book			
sticky note			
basketball court			

4. Discuss: Choose an object from the table. Why did you select the unit of measure that you did?

Check

1. Which unit of measure would you use to measure the area of a wall?

A. square centimeters **B.** square inches **C.** square feet

2. Which unit of measure would you use to measure the area of notebook paper?

A. square centimeters **B.** square inches **C.** square feet

Name _____

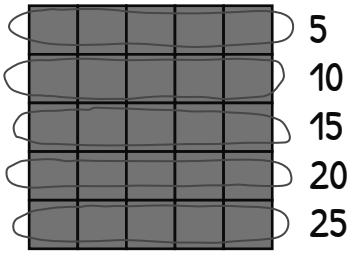
Finding Area by Counting Unit Squares

ML 2.05

Modeled Review

Name: Eva

Determine the area of the rectangle. Show or explain your thinking.



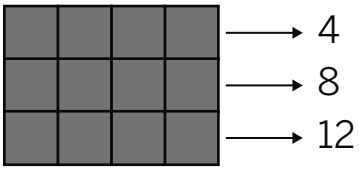
There are 5 rows of 5, so I skip counted by 5.

answer: 25 square units

Guided Practice

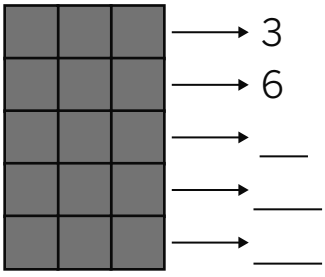
Determine the area of the rectangle.

1.



area: _____ square units

2.



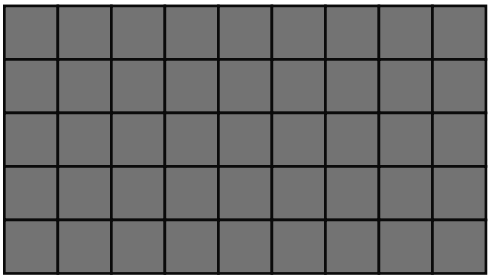
area: _____

Guided Practice

Determine the area of the rectangle. Show or explain your thinking.

3. 

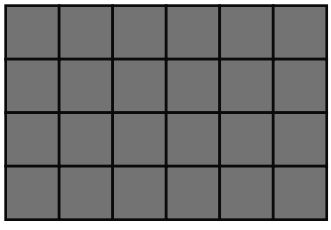
answer: _____

4. 

answer: _____

Check

Determine the area of the rectangle. Show or explain your thinking.



answer: _____

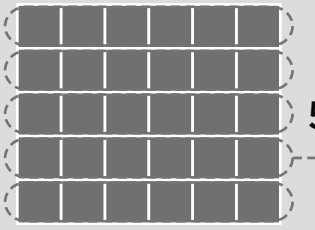
Name _____

Relating Multiplication Expressions to Tiled Rectangles

ML 2.06

Modeled Review

Here is a rectangle with an expression that represents its area.



5 rows with 6 tiles in each row

5 x 6

Guided Practice

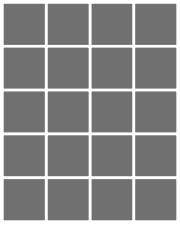
Complete the phrase. Then write an expression to represent the area of each rectangle.

1.

_____ rows with _____ tiles in each row

expression: _____ × _____

2.



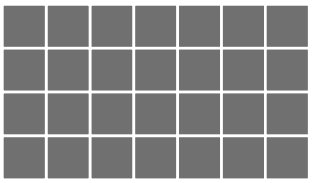
_____

_____ rows with _____ tiles in each row

expression: _____ × _____

Guided Practice

3. Determine the side lengths. Then write an expression to represent the area of the rectangle.

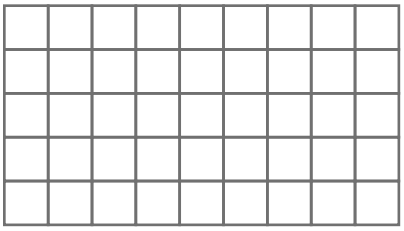


_____

_____ rows with _____ tiles in each row

_____

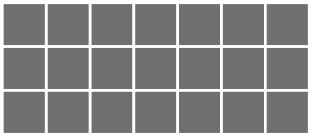
4. Use the grid to create a rectangle whose area can be represented by the expression 3 × 4. Then complete the phrase.



_____ rows with _____ tiles in each row

Check

1. Determine the side lengths. Then write an expression to represent the area of the rectangle.

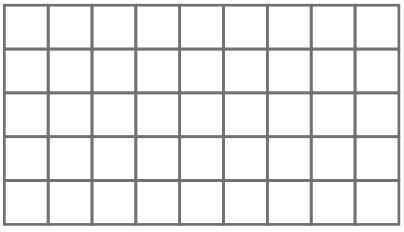


_____

_____ × _____

_____

2. Use the grid to create a rectangle whose area can be represented by the expression 3 × 6.



Name _____

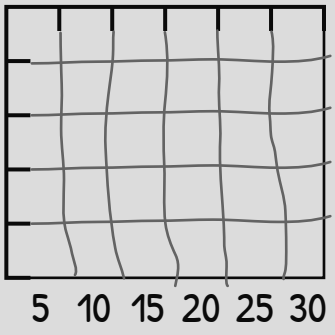
Finding the Area of Rectangles Without a Grid

ML 2.07

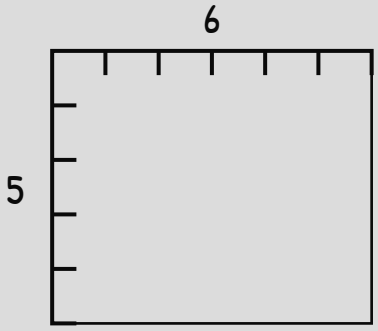
Modeled Review

Dylan and Avery correctly found the area using different methods. Study each of their work.

Dylan's Work



Avery's Work

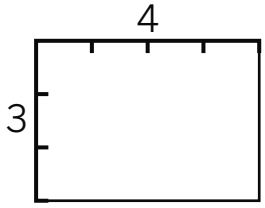


5 × 6 = 30

Guided Practice

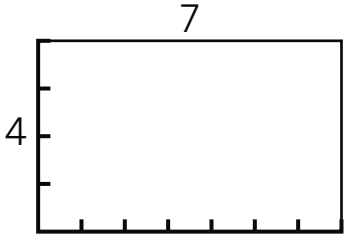
The space between two tick marks represents 1 foot. Determine the area of each rectangle.

1.



3 × 4 = _____ square feet

2.

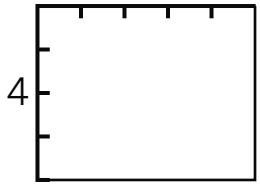


_____ × _____ = _____

Guided Practice

The space between two tick marks represents 1 inch. Determine the area of each rectangle.

3.



expression: _____

area: _____

4.

expression: _____

area: _____

Check

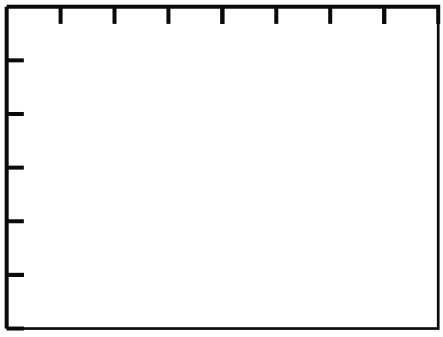
The space between two tick marks represents 1 foot. Determine the area of each rectangle.

1.

expression: _____

area: _____

2.



expression: _____

area: _____

Name _____

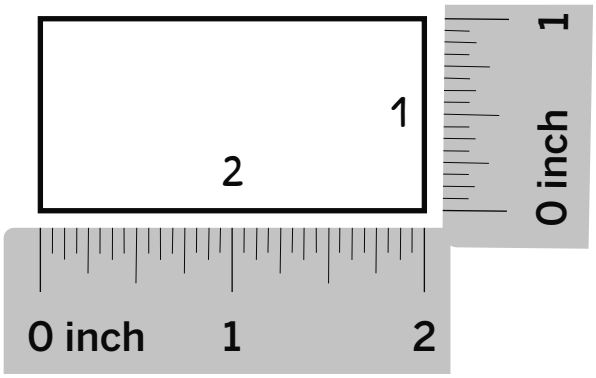
Finding Areas of Rectangles by Measuring Side Lengths

ML 2.08

Modeled Review

Name: Eva

Use an inch ruler to measure the side lengths of the rectangle. Write an equation to represent the area. Then determine the area of the rectangle.

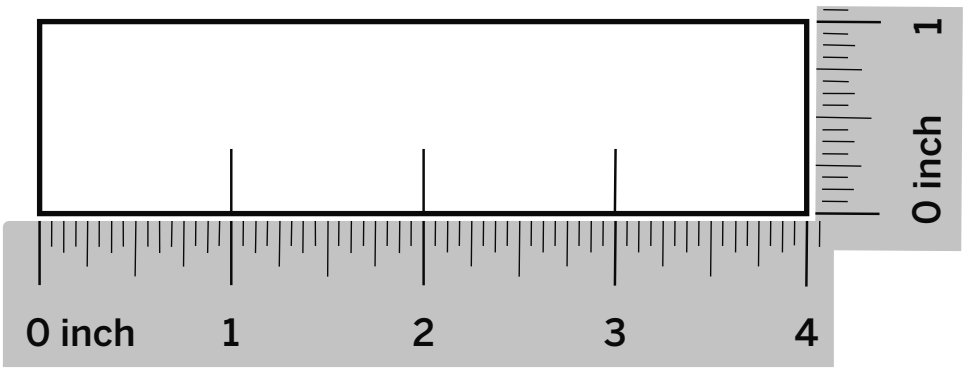


equation: 2 × 1 = 2

area: 2 square inches

Guided Practice

1. Use the rulers shown to measure the side lengths of the rectangle. Then write an equation that represents the area of the rectangle.

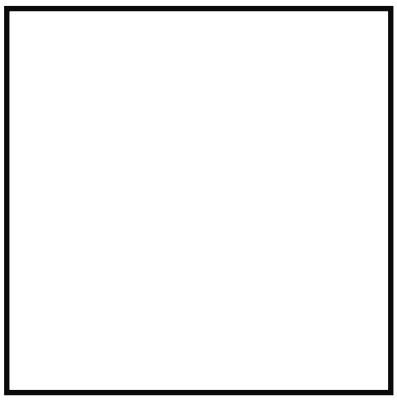


1 inch

____ inches **equation:** ____ × 1 = ____

Guided Practice

2. Use an inch ruler to measure the side lengths of the rectangle. Write an equation to represent the area. Then determine the area of the rectangle.

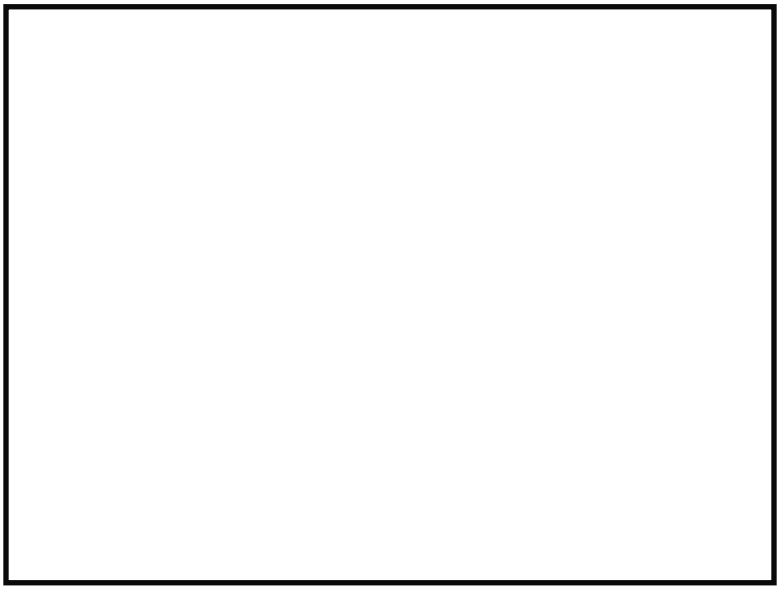


equation: _____

area: _____

Check

Use an inch ruler to measure the side lengths of the rectangle. Write an equation to represent the area. Then determine the area of the rectangle.



equation: _____ **area:** _____

Name _____

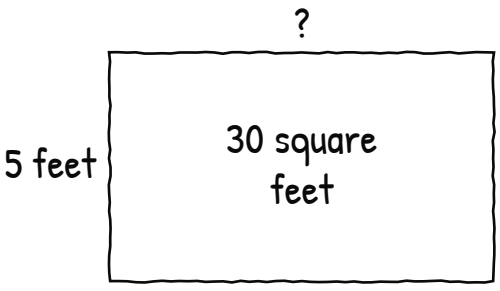
Solving Area Problems With Missing Side Lengths

ML 2.09

Modeled Review

Name: Jack

The area of a rectangular garden is 30 square feet. One side of the garden is 5 feet long. How long is the other side of the garden?



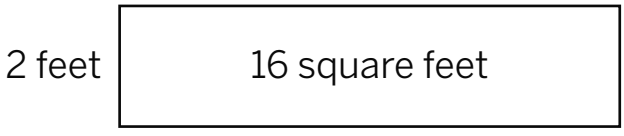
$5 \times ? = 30$

$5 \times 6 = 30$

6 feet

Guided Practice

1. A rectangular sign has an area of 16 square feet. One side length is 2 feet. How long is the other side of the sign?



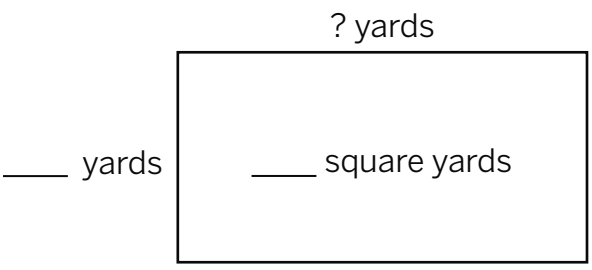
$2 \times \ ? \ = 16$

$2 \times \_\_\_ = 16$

The other side is _____ feet long.

Guided Practice

2. A rectangular wall has a side length of 4 yards. The area of the wall is 24 square yards. How long is the other side of the wall?



_____ × ? = 24

_____ × _____ = 24

The other side is _____ yards long.

3. A rectangular piece of paper has an area of 35 square inches. One side of the paper is 7 inches. How long is the other side? Show or explain your thinking.

Check

A rectangular sign has an area of 40 square feet. One side of the sign is 5 feet long. How long is the other side of the sign? Show or explain your thinking.

Name _____

Finding Area of Rectilinear Figures

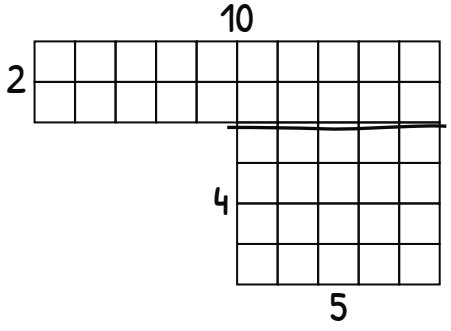
ML 2.10

Modeled Review

Name: Tristan

Determine the area of the figure. Each small square represents an area of 1 square inch. Show or explain your thinking.

rectangle 1: 2 × 10 = 20
rectangle 2: 4 × 5 = 20
20 + 20 = 40

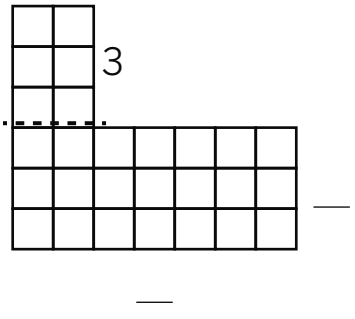


answer: 40 square inches

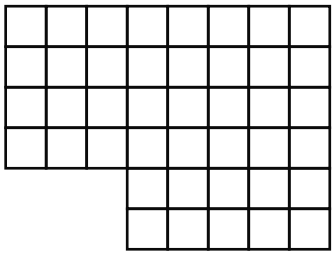
Guided Practice

Draw lines to decompose each figure into rectangles. Then label the side lengths of each rectangle.

1.



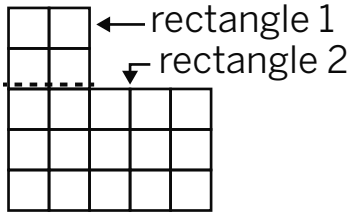
2.



Guided Practice

Determine the area of the figure. Each small square represents an area of 1 square unit. Show or explain your thinking.

3.



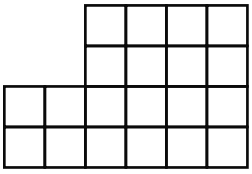
rectangle 1: _____ × _____ = _____

rectangle 2: _____ × _____ = _____

total area: _____ + _____ = _____

answer: _____ square units

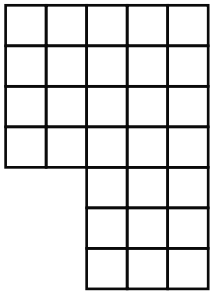
4.



answer: _____

Check

Determine the area of the figure. Each small square represents an area of 1 square unit. Show or explain your thinking.



answer: _____

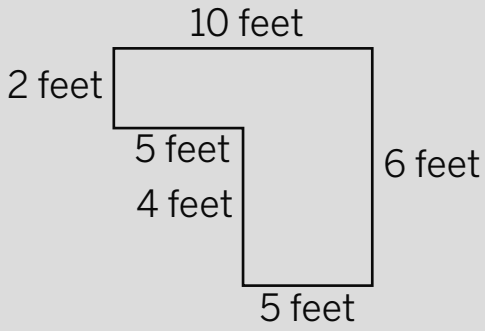
Name _____

Finding Area of Rectilinear Figures Without Grids

ML 2.11

Modeled Review

Students were asked to determine the area of the figure.

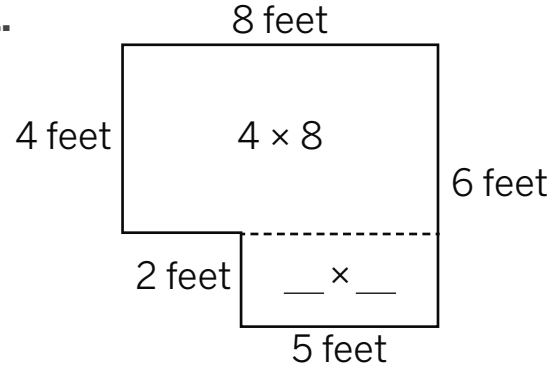


- Maya says you can determine the area by adding 2 × 10 and 4 × 5.
- Jack says you can determine the area by adding 2 × 5 and 6 × 5.

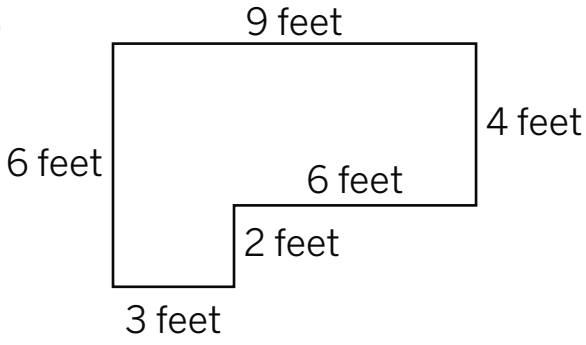
Guided Practice

Draw a line to decompose each figure into rectangles. Then write expressions that represent the area of each rectangle.

1.



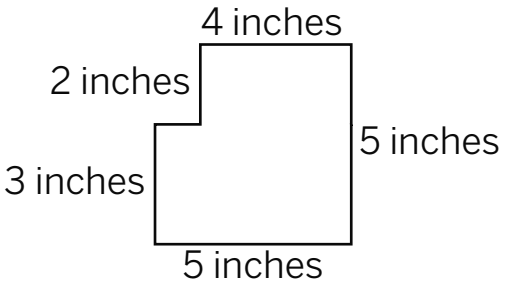
2.



Guided Practice

Determine the area of each figure. Show or explain your thinking.

3.



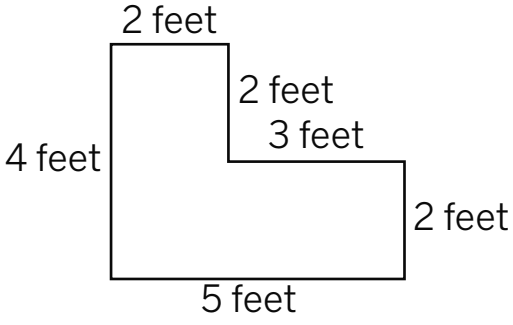
____ × ____ = ____

____ × ____ = ____

total area: ____ + ____ = ____

answer: ____ square inches

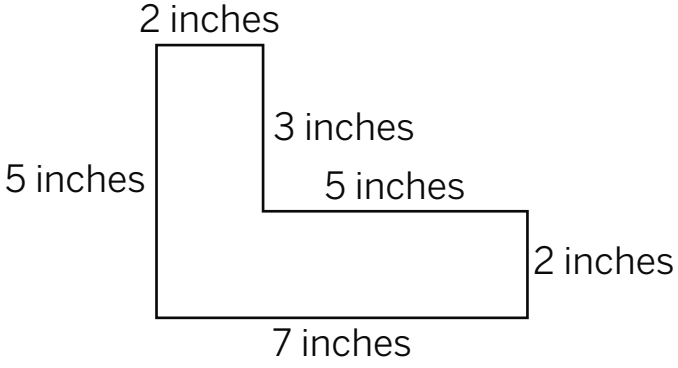
4.



answer: _____

Check

Determine the area of the figure. Show or explain your thinking.



answer: _____

Name _____

Finding Area of Rectilinear Figures With Unknown Side Lengths

ML 2.12

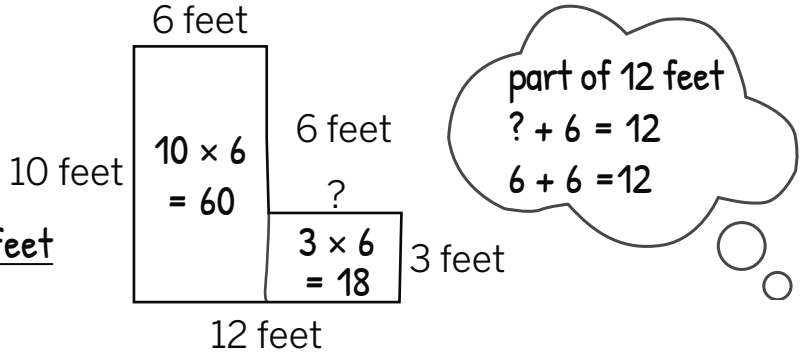
Modeled Review

Name: Avery

Determine the area of the figure. Show or explain your thinking.

18 + 60 = 78

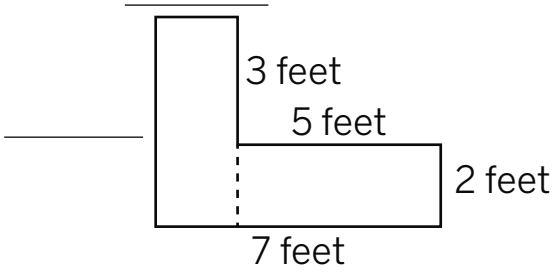
answer: 78 square feet



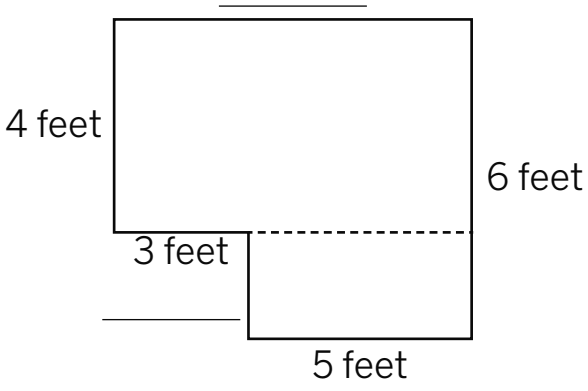
Guided Practice

A dotted line shows how the figure could be split into two rectangles. Determine the unknown side lengths.

1.



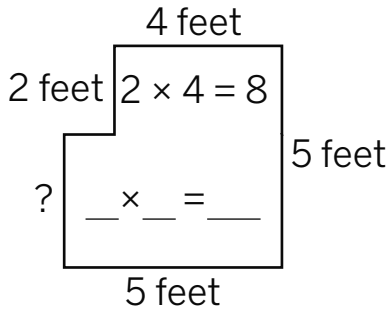
2.



Guided Practice

Determine the area of the figure. Show or explain your thinking.

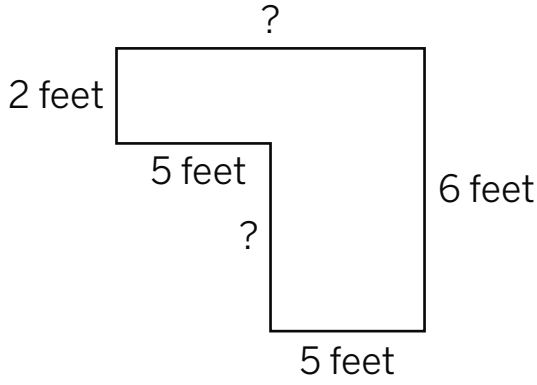
3.



total area: 8 + ____ = ____

answer: ____ square feet

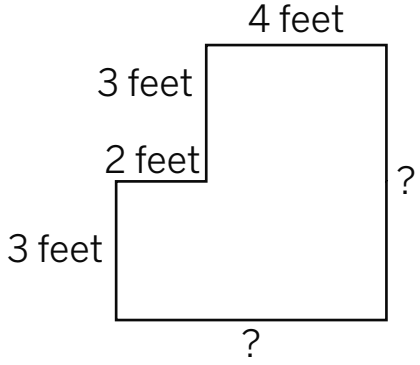
4.



answer: _____

Check

Determine the area of the figure. Show or explain your thinking.



answer: _____

Name _____

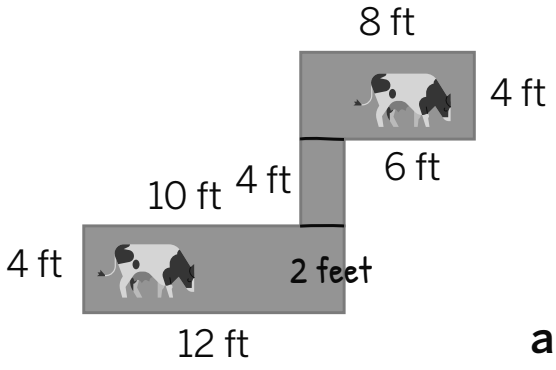
Solving Real-World Problems Involving Area

ML 2.13

Modeled Review

Name: Tristan

Determine the area of the farm. Show or explain your thinking.



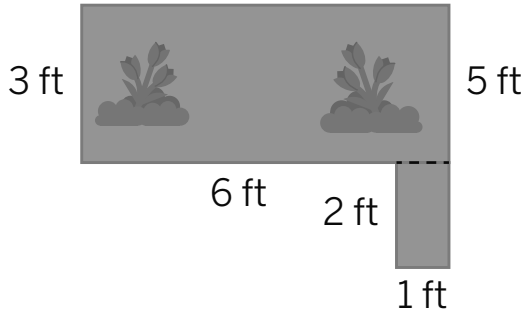
4 x 8 = 32
4 x 12 = 48
4 x 2 = 8
32 + 48 + 8 = 88

answer: 88 square feet

Guided Practice

Determine the area of each garden. Show your thinking.

1.



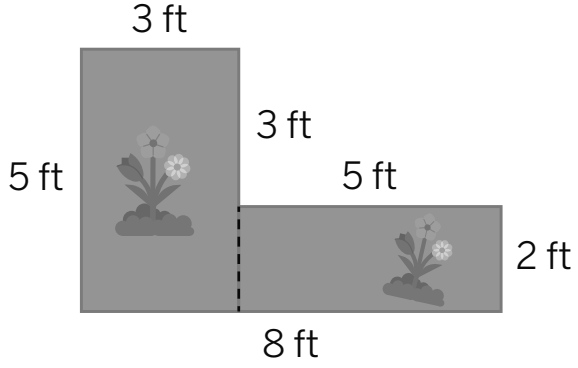
7 × 3 = _____

2 × 1 = _____

_____ + _____ = _____

answer: _____ square feet

2.



5 × 3 = _____

_____ × _____ = _____

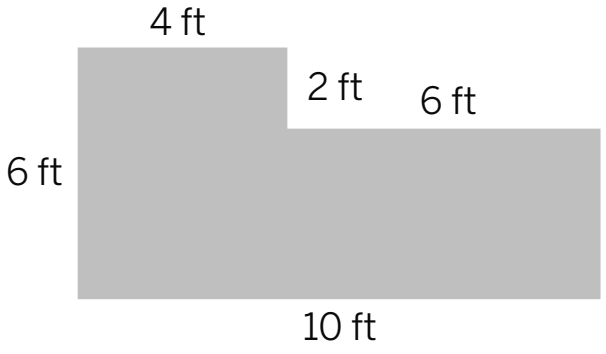
_____ + _____ = _____

answer: _____

Guided Practice

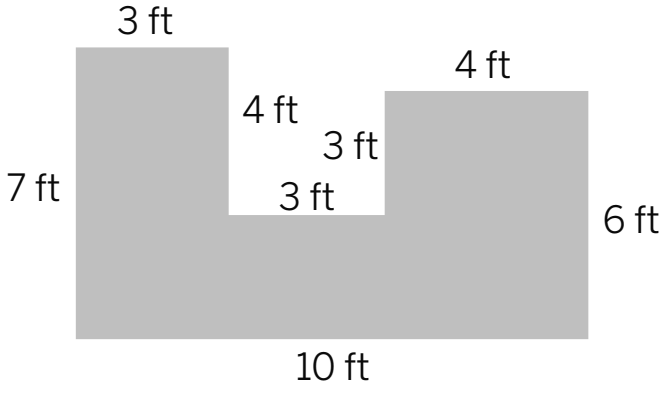
Calculate the area of each room to help determine how much flooring to buy. Show or explain your thinking.

3.



_____ of flooring

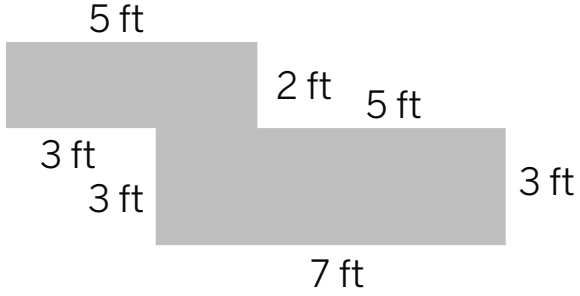
4.



_____ of flooring

Check

Calculate the area of the room to help determine how much flooring to buy. Show or explain your thinking.



_____ of flooring

Unit 3

Mini-Lessons

Name _____

Exploring Patterns in Addition Tables

ML 3.02

Modeled Review

Name: Clare

Calculate each sum.

1. 83 + 9 92

83 + 10 = 93
93 – 1 = 92

2. 460 + 101 561

460 + 100 = 560
560 + 1 = 561

Guided Practice

For Problems 1–3, circle the *first* step when calculating each sum.

1. 52 + 9

A. 52 + 10
B. 52 + 100

2. 145 + 99

A. 145 + 10
B. 145 + 100

3. 87 + 101

A. 87 + 10
B. 87 + 100

For Problems 4–6, circle the *second* step when calculating each sum.

4. 243 + 101

243 + 100 = 343

A. 343 – 1
B. 343 + 1

5. 48 + 9

48 + 10 = 58

A. 58 – 1
B. 58 + 1

6. 65 + 99

65 + 100 = 165

A. 165 – 1
B. 165 + 1

Guided Practice

Calculate each sum.

7. 56 + 9 _____

56 + 10 = 66

66 − ___ = _____

56 + 9 = _____

8. 124 + 101 _____

124 + 100 = 224

_____ + ___ = _____

124 + 101 = _____

9. 761 + 99 _____

_____ + _____ = _____

_____ − _____ = _____

761 + 99 = _____

10. 63 + 101 _____

_____ + _____ = _____

_____ + _____ = _____

_____ + _____ = _____

11. 42 + 9 _____

12. 150 + 101 _____

Check

Calculate each sum.

1. 32 + 9 _____

2. 543 + 101 _____

Name _____

Combining Like Units to Add

ML 3.03

Modeled Review

Name: Eva

Calculate the sum. Show or explain your thinking.

1. 638 + 122

600 + 100 → 700

30 + 20 → 50

8 + 2 → 10

700 + 50 + 10

750 + 10 = 760

I added the 100s first, then the 10s, and the 1s.

answer: 760

Guided Practice

Complete each equation to calculate the sum.

1. 34 + 65

Add tens: 30 + 60 = 90

Add ones: 4 + 5 = 9

90 + 9 = _____

answer: _____

2. 167 + 132

Add hundreds: 100 + 100 = _____

Add tens: 60 + _____ = _____

Add ones: 7 + _____ = _____

_____ + _____ + _____ = _____

answer: _____

Guided Practice

Calculate the sum. Show or explain your thinking.

3. 124 + 324

100 + _____ = _____

20 + _____ = _____

_____ + _____ = _____

_____ + _____ + _____ = _____

answer: _____

4. 523 + 235

answer: _____

5. 324 + 465

answer: _____

6. 326 + 173

answer: _____

Check

Calculate the sum. Show or explain your thinking.

446 + 123

answer: _____

Name _____

Adding Within 1,000 by Place

ML 3.04

Modeled Review

Name: Han

Calculate the sum. Show or explain your thinking.

395 + 183 = 578

300 + 90 + 5
+ 100 + 80 + 3
400 + 170 + 8

I decomposed both addends then added the 100s, 10s, and 1s.

Guided Practice

Complete each equation to calculate the sum.

1. 345 + 235 = _____

300 + 40 + 5
+ 200 + 30 + 5
500 + ☐ + ☐ = ☐

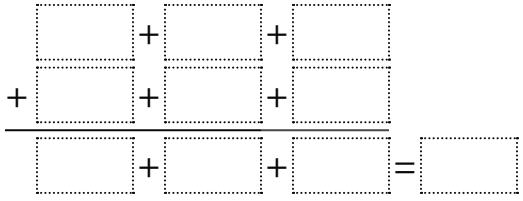
2. 564 + 383 = _____

500 + 60 + 4
+ ☐ + ☐ + ☐
☐ + ☐ + ☐ = ☐

Guided Practice

For Problem 3, complete the equations to calculate the sum. For Problems 4–6, calculate each sum.

3. 674 + 253 = _____



4. 342 + 175 = _____

5. 468 + 362 = _____

6. 721 + 258 = _____

Check

Calculate the sum.

1. 546 + 314 = _____

2. 645 + 273 = _____

Name _____

Adding Using a Partial Sums Algorithm

ML 3.05

Modeled Review

Name: Jack

Calculate the sum.

345 + 219 = 564

300 + 40 + 5
+ 200 + 10 + 9
500 + 50 + 14

Name: Eva

Calculate the sum.

345 + 219 = 564

345
+219
14
50
+500
564

Guided Practice

1. Calculate each sum using expanded form and partial sums algorithms.

Equation	Expanded form	Partial sums algorithm
157 + 232 = _____	100 + 50 + 7 + 200 + 30 + 2 □ + □ + 9	1 5 7 + 2 3 2 9 □ □ + □ □ □ □ □ □
345 + 175 = _____	□ + □ + □ + □ + □ + □ □ + □ + □	□ □ □ + □ □ □ □ □ □ □ □ + □ □ □ □ □ □

Guided Practice

Calculate each sum. Show or explain your thinking.

2. 468 + 321 = _____

3. 534 + 217 = _____

4. 156 + 681 = _____

5. 325 + 342 = _____

Check

Calculate the sum. Show or explain your thinking.

376 + 251 = _____

Name _____

Adding With the Standard Algorithm

ML 3.06

Modeled Review

Name: Dylan

Calculate the sum.

382 + 491 = 873

```
  382
+ 491
  ---
    3
  170
+ 700
  ---
  873
```

Name: Jada

Calculate the sum.

382 + 491 = 873

```
    1
  382
+ 491
  ---
  873
```

Guided Practice

Calculate each sum using partial sums and the standard algorithm.

1. 136 + 263 = _____

```
  1 3 6
+ 2 6 3
  -----
      9
    □□
+ □□□
  -----
  □□□
```

```
  1 3 6
+ 2 6 3
  -----
  □□ 9
```

2. 524 + 381 = _____

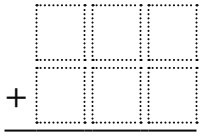
```
  5 2 4
+ 3 8 1
  -----
    □
  □□□
+ □□□
  -----
  □□□
```

```
  □
  5 2 4
+ 3 8 1
  -----
  □□ 5
```

Guided Practice

Calculate the sum. Show or explain your thinking.

3. 192 + 114 = _____



4. 304 + 258 = _____

5. 129 + 207 = _____

6. 490 + 115 = _____

Check

Calculate the sum. Show or explain your thinking.

459 + 260 = _____

Name _____

Composing Units to Add Three-Digit Numbers

ML 3.07

Modeled Review

Name: Eva

Calculate the sum.

247 + 395 = 642

```
  247
+ 395
-----
   12
  130
+ 500
-----
  642
```

Name: Santiago

Calculate the sum.

247 + 395 = 642

```
  11
  247
+ 395
-----
  642
```

Guided Practice

Calculate the sum using partial sums and standard algorithms.

1. 453 + 299 = _____

```
   4  5  3
+  2  9  9
---------
      1  2
   1  4  0
+  □  □  □
---------
   □  □  □
```

```
   □  □
   4  5  3
+  2  9  9
---------
   □  □  2
```

2. 596 + 368 = _____

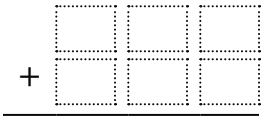
```
   5  9  6
+  3  6  8
---------
      1  4
   □  □  □
+  □  □  □
---------
   □  □  □
```

```
   □  □
   5  9  6
+  3  6  8
---------
   □  □  4
```

Guided Practice

Calculate the sum. Show your thinking.

3. 293 + 688 = _____



4. 575 + 145 = _____

5. 436 + 197 = _____

6. 364 + 478 = _____

Check

Calculate the sum. Show your thinking.

786 + 145 = _____

Name _____

Choosing Algorithms and Strategies to Add

ML 3.08

Modeled Review

Name: Clare

Calculate the sum.

734 + 129 = 863

$$\begin{array}{r} {\scriptstyle 1} \\ 734 \\ +\ 129 \\ \hline 863 \end{array}$$

Guided Practice

Calculate the sum using partial sums and standard algorithms.

1. 237 + 158 = _____

$$\begin{array}{r} 237 \\ +\ 158 \\ \hline 15 \\ \square\square \\ +\ \square\square\square \\ \hline \square\square\square \end{array}$$

$$\begin{array}{r} {\scriptstyle \square} \\ 237 \\ +\ 158 \\ \hline \end{array}$$

2. 379 + 345 = _____

$$\begin{array}{r} 379 \\ +\ 345 \\ \hline \square\square \\ \square\square\square \\ +\ \square\square\square \\ \hline \square\square\square \end{array}$$

$$\begin{array}{r} {\scriptstyle \square\square} \\ 379 \\ +\ 345 \\ \hline \end{array}$$

Guided Practice

Calculate the sum.

3. 265 + 115 = _____

4. 394 + 296 = _____

5. 739 + 168 = _____

6. 268 + 571 = _____

Check

Calculate the sum.

1. 693 + 244 = _____

2. 409 + 199 = _____

Name _____

Subtracting Within 1,000 by Place

ML 3.09

Modeled Review

Name: Han

Determine the difference by subtracting 469 – 248 by place. Show or explain your thinking.

469 = 400 + 60 + 9

248 = 200 + 40 + 8

400 – 200 = 200 60 – 40 = 20 9 – 8 = 1

200 + 20 + 1 = 221

answer: 221

Guided Practice

Determine the difference by subtracting by place.

1. 456 – 124 = _____

456 = 400 + 50 + 6

124 = 100 + 20 + 4

400 – 100 = 300

50 – 20 = _____

_____ – _____ = _____

300 + _____ + _____ = _____

2. 789 – 247 = _____

789 = 700 + 80 + 9

247 = 200 + 40 + 7

700 – 200 = _____

_____ – _____ = _____

_____ – _____ = _____

_____ + _____ + _____ = _____

Guided Practice

Determine the difference by subtracting by place. Show your thinking.

3. 594 – 431 = _____

594 = _____ + _____ + _____

431 = _____ + _____ + _____

_____ – _____ = _____

_____ – _____ = _____

_____ – _____ = _____

_____ + _____ + _____ = _____

4. 839 – 721 = _____

_____ = _____ + _____ + _____

_____ = _____ + _____ + _____

_____ – _____ = _____

_____ – _____ = _____

_____ – _____ = _____

_____ + _____ + _____ = _____

5. 673 – 250 = _____

6. 799 – 485 = _____

Check

Find the difference by subtracting by place. Show your thinking.

927 – 312 = _____

Name _____

Subtracting Using the Expanded Form Algorithm

ML 3.10

Modeled Review

Name: Priya

Calculate the difference. Show or explain your thinking.

382 – 267

70 12
300 + ~~80~~ + ~~2~~
– 200 + 60 + 7
100 + 10 + 5

answer: 115

Guided Practice

Calculate the difference.

1. 383 – 151

300 + 80 + 3
– 100 + 50 + 1
_____
☐ + ☐ + ☐ = ☐

answer: _____

2. 253 – 127

☐ ☐
200 + 50 + 3
– 100 + 20 + 7
_____
☐ + ☐ + ☐ = ☐

answer: _____

Guided Practice

Calculate the difference.

3. 452 – 275

$$\begin{array}{r} \square\ \ \square\ \ \square \\ 400 + 50 + 2 \\ -\ 200 + 70 + 5 \\ \hline \square + \square + \square = \square \end{array}$$

answer: _____

4. 543 – 265

$$\begin{array}{r} \square\ \ \square\ \ \square \\ 500 + 40 + 3 \\ -\ \square + \square + \square \\ \hline \square + \square + \square = \square \end{array}$$

answer: _____

5. 471 – 137

answer: _____

6. 721 – 395

answer: _____

Check

Calculate the difference.

1. 395 – 126

answer: _____

2. 527 – 249

answer: _____

Name _____

Connecting Expanded Form to the Standard Algorithm

ML 3.11

Modeled Review

Two students solved the subtraction problem 739 – 255 using different methods. Compare their work.

Diego's work

600 130

~~700~~ + ~~30~~ + 9

– 200 + 50 + 5

400 + 80 + 4

answer: 484

Maya's work

6 13

~~7~~ ~~3~~ 9

– 2 5 5

4 8 4

answer: 484

Guided Practice

Calculate the difference using expanded form and the standard algorithm.

1. 518 – 326 = _____

400 110

~~500~~ + ~~10~~ + 8

– 300 + 20 + 6

□ + 90 + 2

4 11

~~5~~ ~~1~~ 8

– 3 2 6

□ 9 2

2. 908 – 412 = _____

□ □

~~900~~ + ~~0~~ + 8

– 400 + 10 + 2

□ + □ + 6

□□

~~9~~ ~~0~~ 8

– 4 1 2

□□ 6

Guided Practice

Calculate the difference.

3. 383 – 231 = _____

4. 265 – 148 = _____

5. 627 – 452 = _____

6. 538 – 165 = _____

Check

Calculate the difference.

1. 844 – 139 = _____

2. 564 – 191 = _____

Name _____

Subtracting Within 1,000 Using an Algorithm

ML 3.12

Modeled Review

Name: Han

Find the difference.

425 – 267 = 158

300 110
~~10~~ 15
~~400~~ + ~~20~~ + ~~5~~
– 200 + 60 + 7
100 + 50 + 8

Name: Clare

Find the difference.

425 – 267 = 158

3 11
~~4~~ ~~1~~ 15
~~4~~ ~~2~~ ~~5~~
– 2 6 7
1 5 8

Guided Practice

Calculate the difference using an algorithm of your choice.

1. 547 – 200 = _____

2. 462 – 340 = _____

3. 345 – 123 = _____

4. 762 – 146 = _____

Guided Practice

Calculate the difference using an algorithm of your choice.

5. 684 – 329 = _____

6. 519 – 284 = _____

7. 732 – 418 = _____

8. 876 – 459 = _____

Check

Calculate the difference using an algorithm of your choice.

1. 746 – 317 = _____

2. 526 – 445 = _____

Name _____

Subtracting Across Zeros

ML 3.13

Modeled Review

Name: Santiago

Calculate the difference using expanded form. Show or explain your thinking.

302 – 154 = 148

200 90 12
~~300~~ + ~~0~~ + ~~2~~
– 100 + 50 + 4
100 + 40 + 8

Guided Practice

Calculate the difference using expanded form.

1. 502 – 165 = _____

☐		90		12			
500	+	~~0~~	+	~~2~~			
– 100	+	60	+	5			
☐	+	☐	+	☐	=	☐	

2. 320 – 172 = _____

		☐					
☐		10		10			
300	+	~~20~~	+	~~0~~			
– 100	+	70	+	2			
☐	+	☐	+	☐	=	☐	

Guided Practice

Calculate the difference using expanded form.

3. 406 – 278 = _____

$$\begin{array}{r} \square \quad \square \quad \square \\ 400 + 0 + 6 \\ -\,200 + 70 + 8 \\ \hline \square + \square + \square = \square \end{array}$$

4. 870 – 356= _____

5. 303 – 156= _____

6. 600 – 217 = _____

Check

Calculate the difference using expanded form.

1. 750 – 322 = _____

2. 408 – 219 = _____

Name _____

Subtracting Within 1,000

ML 3.14

Modeled Review

Clare and Jada calculated the difference for the expression 300 – 158.

Clare's work

200 90 10
~~300~~ + ~~0~~ + ~~0~~
– 100 + 50 + 8
100 + 40 + 2

answer: 142

Jada's work

300 – 150 = 150
150 – 8 = 142

answer: 142

Guided Practice

Calculate the difference. Show your thinking.

1. 437 – 200 = _____

2. 582 – 220 = _____

Guided Practice

Calculate the difference. Show your thinking.

3. 500 – 252 = _____

4. 862 – 145 = _____

5. 460 – 120 = _____

6. 702 – 268 = _____

Check

Calculate the difference. Show your thinking.

1. 600 – 325 = _____

2. 550 – 375 = _____

Name _____

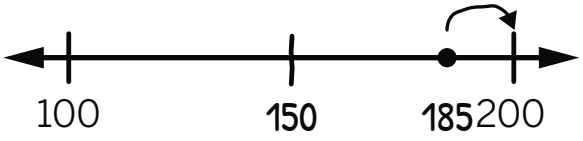
Determining the Nearest Hundred

ML 3.15

Modeled Review

Name: Kai

1. Locate and label 185 on the number line.



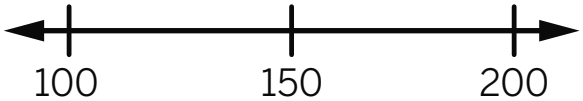
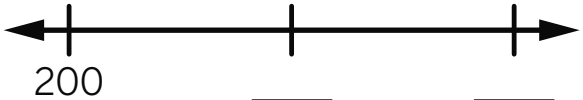
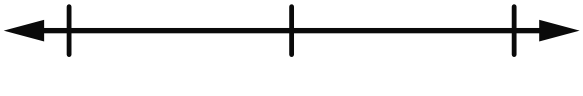
I know 150 is halfway between 100 and 200. Since 185 is more than 150, it rounds to 200.

2. What is the nearest hundred to 185?

200

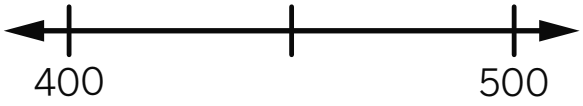
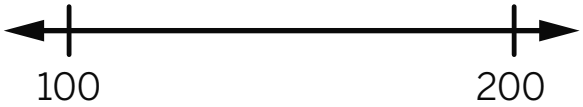
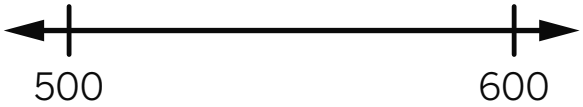
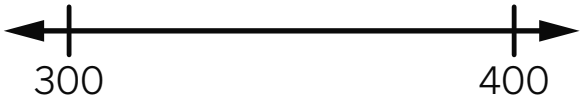
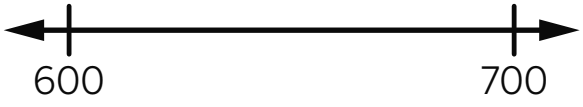
Guided Practice

1. Locate and label the given number and tick marks on the number line. Determine the nearest hundred.

Number	Number line	Nearest hundred
115		
280		
375		

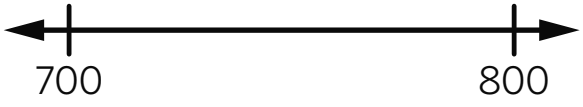
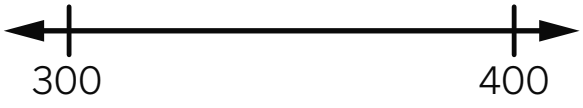
Guided Practice

2. Locate and label the given number on the number line. Determine the nearest hundred. Add and label tick marks if it is helpful.

Number	Number line	Nearest hundred
420		
160		
585		
340		
670		

Check

Locate and label the given number on the number line. Determine the nearest hundred. Add and label tick marks if it is helpful.

Number	Number line	Nearest hundred
780		
315		

Name _____

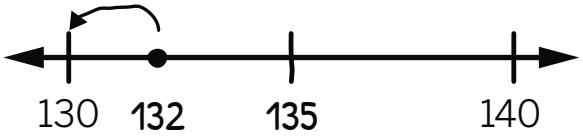
Determining the Nearest Ten

ML 3.16

Modeled Review

Name: Avery

1. Locate and label 132 on the number line.



I know 135 is halfway between 130 and 140. Since 132 is closer to 130 than 140, 130 is the nearest ten.

2. What is the nearest ten to 132?

130

Guided Practice

1. Locate and label the given number and tick marks on the number line. Determine the nearest ten.

Number	Number line	Nearest ten
167	160 165 170	
212	210 215 ____	
418	410 ____ ____	

Guided Practice

2. Locate and label the given number on the number line. Determine the nearest ten. Add and label tick marks if it is helpful.

Number	Number line	Nearest ten
353	350 — 360	
577	570 — 580	
422	420 — 430	
824	820 — 830	
765	760 — 770	
601	600 — 610	

Check

Locate and label the given number on the number line. Determine the nearest ten. Add and label tick marks if it is helpful.

Number	Number line	Nearest ten
956	950 — 960	
372	370 — 380	

Name _____

Rounding to the Nearest Ten or Hundred to Estimate

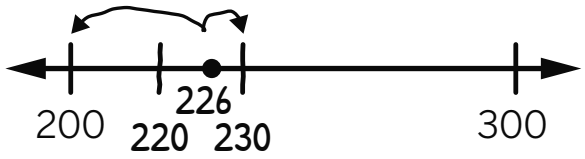
ML 3.17

Modeled Review

Name: Maya

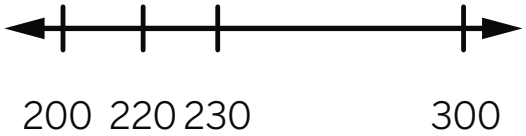
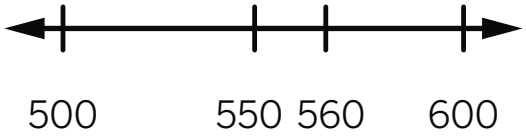
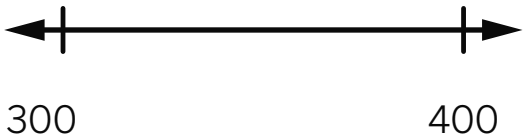
1. Round 226 to the nearest ten. 230

2. Round 226 to the nearest hundred. 200



Guided Practice

1. Complete the table by rounding to the nearest ten and hundred.

Number	Number line	Nearest ten	Nearest hundred
224			
559			
77			
313			

Guided Practice

2. Complete the table by rounding to the nearest ten and hundred.

Number	Nearest ten	Nearest hundred
216		
94		
350		
39		
11		
429		
60		
165		
501		

Check

Complete the table by rounding to the nearest ten and hundred.

Number	Nearest ten	Nearest hundred
168		
321		

Name _____

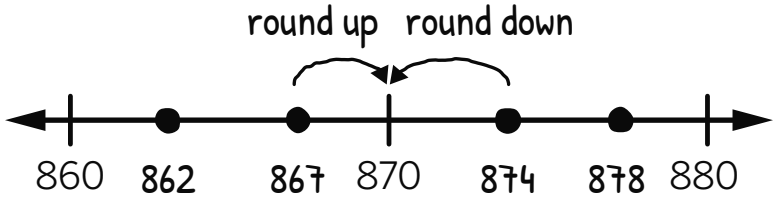
Determining Numbers That Round to Given Tens and Hundreds

ML 3.18

Modeled Review

Name: Jack

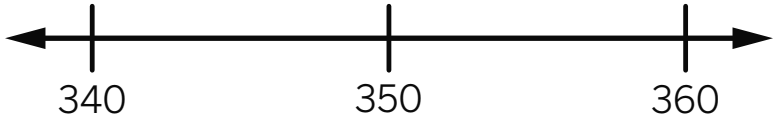
Select *all* the numbers that round to 870 when rounded to the nearest ten.



862 (874) 878 (867)

Guided Practice

For Problems 1 and 2, use the number line if it is helpful.



1. List *all* the numbers *less* than 350 that round to 350 when rounded to the nearest ten.

345, 346, 347, _____, _____

2. List *all* the numbers *greater* than 350 that round to 350 when rounded to the nearest ten.

351, _____, _____, _____

Guided Practice

3. Circle *all* the numbers that round to 630 when rounded to the nearest ten.

635 624 629 620 632

4. Circle *all* the numbers that round to 200 when rounded to the nearest hundred.

284 185 136 227

5. Circle *all* the numbers that round to 220 when rounded to the nearest ten.

221 215 228 211 219

6. Circle *all* the numbers that round to 400 when rounded to the nearest hundred.

415 320 375 483 390

Check

1. Circle *all* the numbers that round to 150 when rounded to the nearest ten.

142 157 153 149 145

2. Circle *all* the numbers that round to 500 when rounded to the nearest hundred.

481 581 495 532 447

Name _____

Rounding to Make Reasonable Estimates

ML 3.19

Modeled Review

Name: Eva

Use rounding to estimate the sum or difference.

1. 346 + 502

350 + 500 = 850

estimate: 850

2. 198 + 615 – 298

200 + 600 = 800

800 – 300 = 500

estimate: 500

Guided Practice

Use rounding to estimate the sum or difference.

1. 405 + 290

400 + 300 = _____

estimate: _____

2. 375 + 180 – 98

400 + _____ = _____

600 – _____ = _____

estimate: _____

Guided Practice

Use rounding to estimate the sum or difference.

3. 595 – 210

600 – _____ = _____

estimate: _____

4. 552 + 380

estimate: _____

5. 715 + 105 – 420

estimate: _____

6. 610 + 275 – 197

estimate: _____

Check

Use rounding to estimate the sum or difference.

1. 682 + 175

estimate: _____

2. 387 + 302 – 425

estimate: _____

Name _____

Connecting Tape Diagrams, Equations, and Situations

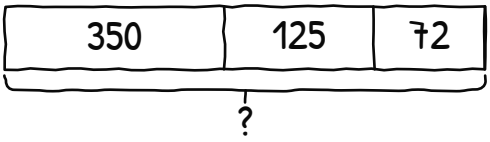
ML 3.20

Modeled Review

Name: Maya

Choose the equation that represents the situation.

Eva has 350 stickers. She buys 125 more and receives 72 more from her sister. How many stickers does Eva have now?



A. ? + 125 + 72 = 350

B. ? = 350 + 125 – 72

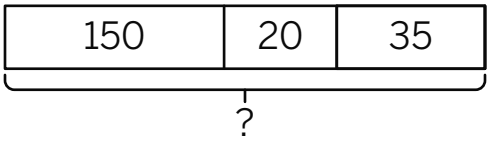
C. 350 + 125 + 72 = ?

D. 350 + 72 + ? = 125

Guided Practice

Circle the equation that represents the situation.

1. Avery has 150 stickers. She gets 20 more stickers from a friend and then buys 35 stickers from the store. How many stickers does Avery have now?



A. ? = 150 + 20 – 35

B. ? = 150 + 20 + 35

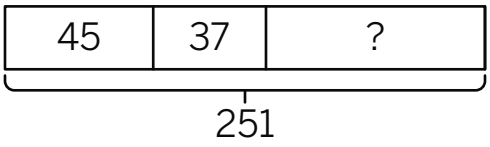
C. 150 – 20 – 35 = ?

D. ? + 20 + 35 = 150

Guided Practice

Circle the equation that represents the situation.

2. Clare has 251 beads. 45 are blue, 37 are green, and the rest are purple. How many beads are purple?



A. 45 + 37 + ? = 251

B. 251 + 45 + 37 = ?

C. 251 – 45 – 31 = ?

D. 251 + 35 + ? = 45

3. Diego has 180 baseball cards. He bought 36 more and gave 45 away to his brother. How many baseball cards does Diego have left?

A. ? = 180 – 45 – 37

B. 180 + 36 + 45 = ?

C. 180 + 45 + ? = 37

D. 180 + 36 – 45 = ?

Check

Circle the equation that represents the situation.

There are 620 books in the library. 213 books were checked out and the library received 150 more books. How many books are left in the library?

A. 620 = 213 + 150 + ?

B. ? = 620 – 213 + 150

C. ? = 620 + 213 + 150

D. 620 – 150 – 213 = ?

Name _____

Writing Equations Using Letters for Unknown Quantities

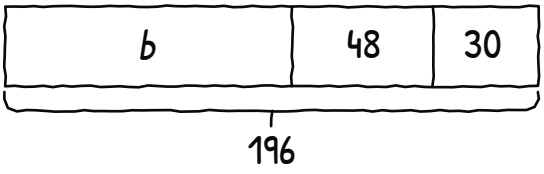
ML 3.21

Modeled Review

Name: Dylan

Write an equation with a letter for the unknown quantity to represent the situation.

Jada had 196 beads. She used 48 beads to make a craft. Then she gave 30 beads to a friend. How many beads did Jada have left?



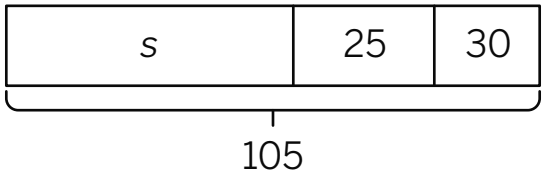
b = beads

equation: 196 – 48 – 30 = b

Guided Practice

Write an equation with a letter for the unknown quantity to represent the situation.

1. There were 105 students playing soccer. 25 left to play tag and 30 left to play basketball. How many students were still playing soccer?



equation: _____

Guided Practice

Write an equation with a letter for the unknown quantity to represent the situation. Use a tape diagram if it is helpful.

2. There are some students in the cafeteria. Then 2 more classes came in with 20 students each. Now there are 150 students in the cafeteria. How many students were there before?

equation: _____

3. 75 students are reading chapter books, 15 students are reading comic books, and 10 are reading picture books. How many students are reading?

equation: _____

Check

Write an equation with a letter for the unknown quantity to represent the situation.

There were 130 students at recess. Then one class of 24 students and one class of 30 students joined them. How many students were at recess?

equation: _____

Name _____

Using Representations to Make Sense of Two-Step Problems

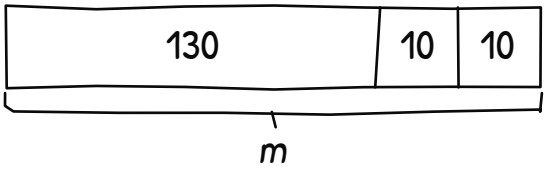
ML 3.22

Modeled Review

Name: Maya

Represent the problem with a tape diagram and solve. Show your thinking.

Santiago read for 130 minutes last week. He is planning to read 10 minutes per day for 2 more days. How many minutes will Santiago read altogether?



m = minutes
$130 + 10 + 10 = m$
$130 + 20 = 150$

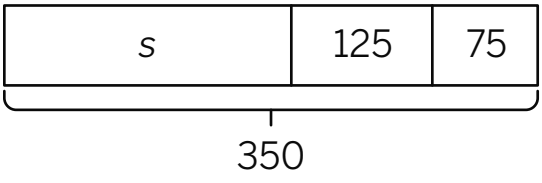
equation: $130 + 10 + 10 = m$

150 minutes

Guided Practice

Represent the problem with a tape diagram and solve. Show your thinking.

1. There are 350 students participating in Field Day. 125 are doing indoor sports, 75 are on the blacktop, and the rest are on the field. How many students are on the field?



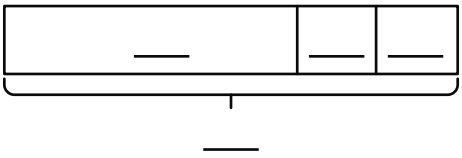
equation: _____

_____ students

Guided Practice

Represent the problem with a tape diagram and solve. Show your thinking.

2. Han spent 85 minutes playing outside on Monday and 15 minutes playing outside on both Tuesday and Wednesday. How many minutes did Han spend playing outside?



equation: _____ _____ minutes

3. There are 240 students in after school clubs. There are 65 students in the science club and 34 in the art club. How many students are in other clubs?

equation: _____ _____ students

Check

Represent the problem with a tape diagram and solve. Show your thinking.

Clare used 178 stickers last week and 20 stickers each day for the next 2 days. How many stickers did Clare use?

equation: _____ _____ stickers

Unit 4

Mini-Lessons

Name _____

Representing Division Situations With Drawings and Expressions

ML 4.02

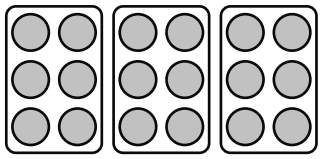
Modeled Review

Name: Diego

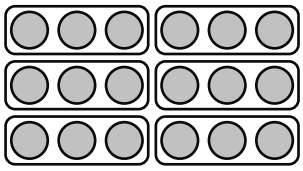
Eva has 18 peaches. She put 6 peaches into each basket.

1. Select the drawing that represents the situation.

A.



B.



2. Select the expression that represents the situation.

A. $18 \div 3$ **B.** 6×18 **C.** $18 \div 6$ **D.** 18×3

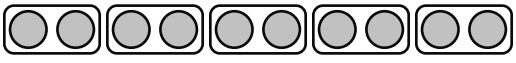
Guided Practice

1. Draw a line from each drawing to the situation it represents.

8 apples in 2 baskets

10 kiwis in 5 baskets

8 lemons in 4 baskets



10 oranges in 2 baskets

Guided Practice

2. Complete the table by matching each expression with the situation it represents.

12 ÷ 4	20 ÷ 5	28 ÷ 7

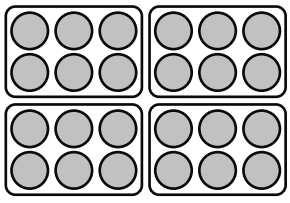
Situation	Expression
There are 20 strawberries split evenly into bowls with cereal. Each bowl has 5 strawberries.	
28 blueberries are split into bowls with yogurt. Each bowl has 7 blueberries.	
Maya picked 12 apples at the apple orchard. She gave 4 apples to each friend.	

Check

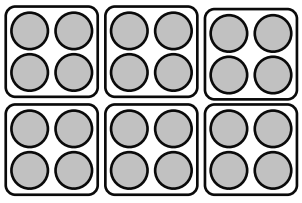
Eva has 24 plums. She puts 4 plums into each basket.

1. Select the drawing that represents the situation.

A.



B.



2. Select the expression that represents the situation.

A. 24 × 4 **B.** 24 ÷ 4 **C.** 24 ÷ 6 **D.** 6 × 24

Name _____

Representing Situations With Division Equations

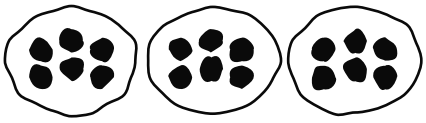
ML 4.03

Modeled Review

Name: Priya

Solve the problem and write a division equation to represent the situation.

Clare is putting 18 marbles into 3 bags with the same number of marbles in each bag. How many marbles are in each bag?

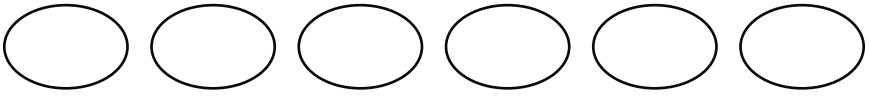


equation: 18 ÷ 3 = 6 **answer:** 6 marbles

Guided Practice

Solve the problem and write a division equation to represent the situation.

1. Kai is playing with 24 building blocks. Kai split them into 6 equal stacks. How many building blocks are in each stack?

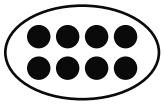


equation: 24 ÷ 6 = _____ **answer:** _____ building blocks

Guided Practice

Solve the problem and write a division equation to represent the situation.

2. Jada is putting 32 stickers in her sticker book. She fills each page with 8 stickers. How many pages did Jada fill?



equation: _____ **answer:** _____

3. Jack is playing with 15 toy cars. He put the cars in 5 equal groups. How many cars are in each group?

equation: _____ **answer:** _____

Check

Solve the problem and write a division equation to represent the situation.

Dylan is putting 27 erasers into 3 pencil boxes with the same number of erasers in each pencil box. How many erasers are in each pencil box?

equation: _____ **answer:** _____

Name _____

Representing and Solving Division Problems

ML 4.04

Modeled Review

Name: Dylan

Solve the problem. Show your thinking.

The pet store owner got 20 new fish to sell. He split them equally into 5 fish tanks. How many fish did he put in each tank?

answer: 4 fish

Guided Practice

Solve the problem. Show your thinking.

1. Avery is making 24 biscuits. She will put 8 biscuits on each baking sheet. How many baking sheets will she need?

answer: _____ baking sheets

Guided Practice

Solve the problem. Show your thinking.

2. Jack had 30 chairs to set up at tables. He put 5 chairs at each table. How many tables were there?

answer: _____

3. Four friends earned 40 dollars at the bake sale. They shared the money equally. How much did each person get?

answer: _____

Check

Solve the problem. Show your thinking.

Maya has 28 flowers to put in pots. She plans to fill each pot with 7 flowers. How many pots will she fill?

answer: _____

Name _____

Representing Division Situations as Unknown Factor Problems

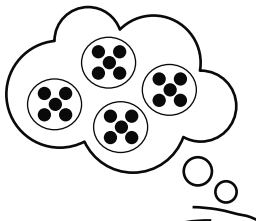
ML 4.05

Modeled Review

Name: Eva

Circle two equations that represent the story problem.

There are 20 books in 4 bins. Each bin has the same number of books. How many books are in each bin?



20 × 4 = ? (4 × ? = 20) ? ÷ 4 = 20 (20 ÷ 4 = ?)

Guided Practice

1. The equation 40 ÷ 8 = ? represents the story problem. Circle another equation that represents the story problem.

There are 40 notebooks put equally into 8 stacks. How many notebooks are in each stack?

(8 × ? = 40) 40 × 8 = ?

2. The equation 42 ÷ 6 = ? represents the story problem. Circle another equation that represents the story problem.

Diego put 42 crayons in 6 boxes. Each box has the same number of crayons. How many crayons are in each box?

42 × 6 = ? 6 × ? = 42

Guided Practice

Circle two equations that represent the story problem.

3. Clare put 21 pencils in bags. She put 7 pencils in each bag. How many bags are there?

? × 7 = 21 ? ÷ 7 = 21 21 × 7 = ? 21 ÷ 7 = ?

4. Avery put 28 erasers in 4 bins. Each bin has the same number of erasers. How many erasers are in each bin?

28 × 4 = ? 28 ÷ 4 = ? ? × 4 = 28 ? ÷ 4 = 28

5. Jack put 35 glue sticks in boxes. He put 5 glue sticks in each box. How many boxes are there?

? ÷ 5 = 35 35 × 5 = ? 35 ÷ 5 = ? ? × 5 = 35

Check

Circle two equations that represent the story problem.

There are 32 markers in boxes. Each box has 8 markers. How many boxes are there?

32 ÷ 8 = ? 32 × 8 = ? ? ÷ 8 = 32 ? × 8 = 32

Name _____

Representing Situations With Multiplication and Division Equations

ML 4.06

Modeled Review

Name: Han

Write a multiplication equation and a division equation for the situation. Use a letter to represent the unknown value.

Santiago picked 20 mini tomatoes from his garden to put in salads. He put 5 tomatoes in each salad.

multiplication equation: $s \times 5 = 20$

division equation: $20 \div 5 = s$

Guided Practice

Complete the multiplication equation and division equation for each situation. Use a letter to represent the unknown value.

Situation	Multiplication equation	Division equation
Dylan plants 12 zucchini plants. He splits them between 4 pots.	$4 \times z = 12$	$12 \div 4 =$ ___
Clare plants 18 pepper seeds. She puts 6 seeds in each row.	$r \times$ ___ $= 18$	$18 \div 6 =$ ___
Eva picked 21 carrots. She splits them between 3 bowls.	___ $\times$ ___ $= 21$	$21 \div$ ___ $=$ ___
Tristan plants 24 lilies. He puts 4 in each row.	___ $\times$ ___ $=$ ___	___ $\div$ ___ $=$ ___

Guided Practice

Write a multiplication equation and a division equation for each situation. Use a letter to represent the unknown value.

Situation	Multiplication equation	Division equation
Jack has 28 sunflower seeds. He puts 7 seeds in each row.		
Priya picked 54 cucumbers. She puts 9 in each bag.		
Avery picked 36 daisies. She split them equally between 6 bouquets.		
Maya planted 35 pumpkin seeds. She put 7 in each row.		

Check

Write a multiplication equation and a division equation for the situation. Use a letter to represent the unknown value.

Jada has 21 tulip bulbs to plant in 3 equal rows in her garden.

multiplication equation: _____

division equation: _____

Name _____

Identifying Related Multiplication and Division Facts

ML 4.07

Modeled Review

Name: Avery

Write the multiplication fact that helps you determine the value of the ?. Then write the quotient.

1. 12 ÷ 4 = ? **multiplication fact:** 3 × 4 = 12 **quotient:** 3

2. 48 ÷ 6 = ? **multiplication fact:** 8 × 6 = 48 **quotient:** 8

Guided Practice

1. Complete the related multiplication and division equations for each given multiplication fact.

If I know...	Then I know...	If I know...	Then I know...
3 × 9 = 27	9 × ___ = 27 27 ÷ 9 = ___ ___ ÷ 3 = 9	4 × 8 = 32	8 × ___ = 32 ___ ÷ 4 = 8 32 ÷ ___ = 4
5 × 6 = 30	___ × 5 = 30 30 ÷ ___ = 6 30 ÷ ___ = ___	6 × 9 = 54	9 × ___ = 54 ___ ÷ 6 = ___ 54 ÷ 9 = ___

Guided Practice

2. Complete the related multiplication and division equations for each given multiplication fact.

If I know...	Then I know...	If I know...	Then I know...
4 × 7 = 28	___ × ___ = ___ ___ ÷ ___ = ___ ___ ÷ ___ = ___	8 × 7 = 56	___ × ___ = ___ ___ ÷ ___ = ___ ___ ÷ ___ = ___
9 × 10 = 90		4 × 9 = 36	
6 × 7 = 42		3 × 7 = 21	

Check

Write the multiplication fact that helps you determine the value of the ?. Then write the quotient.

1. 24 ÷ 4 = ? **multiplication fact:** _____ **quotient:** ____

2. 63 ÷ 9 = ? **multiplication fact:** _____ **quotient:** ____

Name _____

Using Multiplication Facts to Determine Other Facts

ML 4.08

Modeled Review

Name: Santiago

Use the first fact to calculate the product of the second fact.

1. 2 × 6 = 12 How does 2 × 6 help you know 3 × 6?

3 × 6 = 18 It is one more group of 6 and 12 + 6 = 18.

2. 2 × 8 = 16 How does 2 × 8 help you know 4 × 8?

4 × 8 = 32 4 x 8 is 2 × 8 + 2 × 8 and 16 + 16 = 32.

Guided Practice

Use the first fact to calculate the product of the second fact.

1. 2 × 4 = 8

3 × 4 = _____

2. 2 × 7 = 14

3 × 7 = _____

3. 5 × 8 = _____

6 × 8 = _____

4. 5 × 7 = _____

6 × 7 = _____

Guided Practice

Use the first fact to calculate the product of the second fact.

5. 2 × 6 = _____

4 × 6 = _____

6. 2 × 4 = _____

4 × 4 = _____

7. 4 × 3 = _____

8 × 3 = _____

8. 4 × 6 = _____

8 × 6 = _____

9. 4 × 5 = _____

8 × 5 = _____

How does 4 × 5 help you know 8 × 5?

_____

_____

_____

Check

Use the first fact to calculate the product of the second fact.

1. 2 × 8 = _____

3 × 8 = _____

How does 2 × 8 help you know 3 × 8?

_____

_____

_____

2. 2 × 7 = _____

4 × 7 = _____

How does 2 × 7 help you know 4 × 7?

_____

_____

_____

Name _____

Representing Multiplication Using Rectangles

ML 4.09

Modeled Review

Name: Tristan

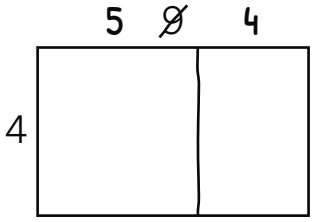
Select the expression that has the same value as 4 × 9. Use the rectangle if it is helpful.

A. 9 × 4 + 9 × 4

B. 4 × 5 + 4 × 4

C. 9 × 4 + 9 × 5

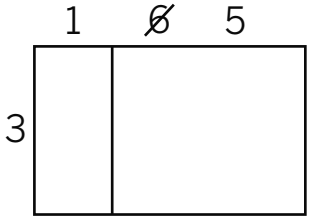
D. 2 × 5 + 2 × 4



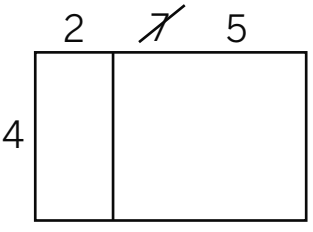
Guided Practice

Complete each equation to match the composed rectangles.

1. 3 × 6 = 3 × 1 + 3 × _____



2. 4 × 7 = 4 × 5 + _____ × _____

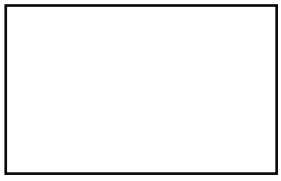


Guided Practice

Complete each equation. Use the rectangle if it is helpful.

3. $6 \times 9 = 6 \times$ _____ + _____ × _____

4. $3 \times 7 = 3 \times$ _____ + _____ × _____



5. $4 \times 8 =$ _____ × _____ + _____ × _____

Check

Select the expression that has the same value as 7 × 6. Use the rectangle if it is helpful.

A. $6 \times 7 + 6 \times 4$

B. $3 \times 2 + 3 \times 2$

C. $6 \times 5 + 6 \times 5$

D. $6 \times 5 + 6 \times 2$

Name _____

Writing Equivalent Multiplication Expressions

ML 4.10

Modeled Review

Name: Jack

Complete each equation. Then write the product.

$6 \times 9 = 6 \times$ 5 $+ 6 \times$ 4

product: 54

9 = 5 + 4

5 ~~8~~ 4

6

Guided Practice

Decompose the rectangle and write two expressions to represent it. Then calculate the product.

1.

5 ~~8~~ 3

4 | $4 \times 5 =$ ___ | $4 \times 3 =$ ___

expression: 4×8

expression: $4 \times 5 + 4 \times$ _____

_____ + _____

product: _____

2.

___ 9 ___

3 | ___ × ___ = ___ | ___ × ___ = ___

expression: _____

expression: _____

_____ + _____

product: _____

Guided Practice

Complete each equation. Then write the product.

3. $3 \times 8 = 3 \times$ _____ $+ 3 \times$ _____ **product:** _____

4. $5 \times 6 = 5 \times$ _____ $+ 5 \times$ _____ **product:** _____

5. $6 \times 8 = 6 \times$ _____ $+ 6 \times$ _____ **product:** _____

6. $4 \times 7 = 4 \times$ _____ $+ 4 \times$ _____ **product:** _____

Check

Complete each equation. Then write the product.

1. $3 \times 7 = 3 \times$ _____ $+ 3 \times$ _____ **product:** _____

2. $7 \times 6 = 7 \times$ _____ $+ 7 \times$ _____ **product:** _____

Name _____

Multiplying a One-Digit Number by Multiples of Ten

ML 4.11

Modeled Review

Name: Dylan

Calculate the product.

$8 \times 30 =$ 240

$8 \times 3 \times 10$
$8 \times 3 = 24$
$24 \times 10 = 240$

Guided Practice

Calculate the product.

1. $3 \times 40 = 3 \times 4 \times 10 = 12 \times 10 =$ _____

2. $6 \times 60 = 6 \times 6 \times 10 =$ _____ $\times 10 =$ _____

3. $5 \times 70 = 5 \times$ _____ $\times 10 =$ _____ $\times 10 =$ _____

4. $4 \times 50 =$ _____ $\times$ _____ $\times 10 =$ _____ $\times 10 =$ _____

5. $7 \times 30 =$ _____ $\times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____

Guided Practice

Calculate the product.

6. 4 × 30 = _____

7. 3 × 90 = _____

8. 5 × 50 = _____

9. 6 × 40 = _____

10. 4 × 80 = _____

Check

Calculate the product.

9 × 40 = _____

Name _____

Multiplying a One-Digit Number by a Teen Number

ML 4.12

Modeled Review

Name: Clare

Calculate the product of 4 × 16. Show your thinking.

	10	6
4	4 × 10 = 40	4 × 6 = 24

40 + 24 = 64

answer: 64

Guided Practice

Calculate the product. Show your thinking.

1. 5 × 13

	10	3
5	5 × 10 = ___	5 × 3 = ___

50 + 15 = _____

2. 4 × 14

	10	4
4	4 × ___ = ___	4 × ___ = ___

40 + _____ = _____

Guided Practice

Calculate the product. Show your thinking.

3. 7 × 13

	10	___
7	7 × 10 = ___	7 × 3 = ___

_____ × 10 + 7 × _____

_____ + _____ = _____

4. 5 × 17

	___	___
5		

5 × _____ + _____ × _____

_____ + _____ = _____

5. 4 × 17

answer: _____

6. 3 × 18

answer: _____

Check

Calculate the product of 6 × 16. Show your thinking.

answer: _____

Name _____

Solving Multiplication Problems Involving Teen Numbers

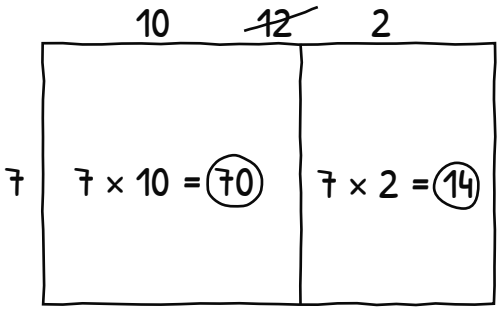
ML 4.13

Modeled Review

Name: Eva

Clare is buying a rug for her room. The rug is 7 feet by 12 feet. What is the area of the rug?

7 × 12



7 × 10 + 7 × 2 = 70 + 14

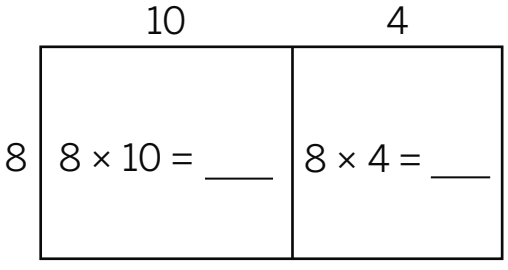
70 + 14 = 84

answer: 84 sq. feet

Guided Practice

Calculate the product. Show your thinking.

1. Clare is remodeling her bedroom. The floor measures 8 feet by 14 feet. What is the area of her bedroom floor?



8 × 10 + 8 × 4 = _____ + _____

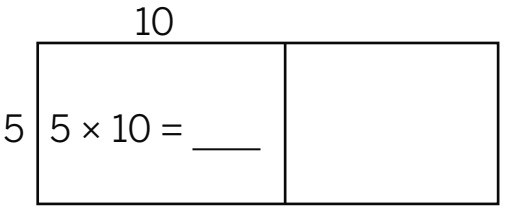
_____ + _____ = _____

answer: _____

Guided Practice

Calculate the product. Show your thinking.

2. Clare found a large poster that she wants to put on her wall. It measures 5 feet by 12 feet. What is the area of the poster?



_____ + _____ = _____

answer: _____

3. Clare wants to install a garden in her backyard. It measures 4 feet by 16 feet. What is the area of the garden?

answer: _____

Check

Calculate the product. Show your thinking.

Clare is helping her parents redesign the living room. The floor measures 7 feet by 14 feet. What is the area of the living room floor?

answer: _____

Name _____

Multiplying Within 100

ML 4.14

Modeled Review

Name: Jada

Calculate the product of 3 × 24. Show your thinking.

	20	4
3	3 × 20 = 60	3 × 4 = 12

60 + 12 = 72

answer: 72

Guided Practice

Calculate the product. Show your thinking.

1. 3 × 33

	30	3
3	3 × 30 = ___	3 × 3 = __

90 + 9 = _____

2. 4 × 24

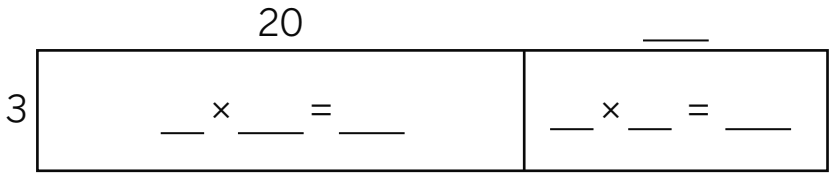
	20	4
4	4 × ___ = ___	4 × __ = ___

80 + _____ = _____

Guided Practice

Calculate the product. Show your thinking.

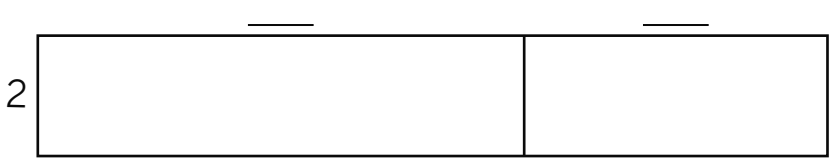
3. 3 × 29



_____ × 20 + 3 × _____

_____ + _____ = _____

4. 2 × 47



2 × _____ + _____ × _____

_____ + _____ = _____

5. 2 × 42

answer: _____

6. 3 × 31

answer: _____

Check

Calculate the product of 2 × 37. Show your thinking.

answer: _____

Name _____

Solving Two-Step Story Problems

ML 4.15

Modeled Review

Name: Maya

Solve the problem and write an equation with a letter for the unknown. Show your thinking.

At the zoo, the food storage room had 135 bananas for the monkeys. The zookeeper brought 6 more baskets of 10 bananas. How many bananas are there in the storage room now?

Step 1: 6 × 10 = 60

Step 2: 135 + 60 = *b*

answer: 195 bananas

Guided Practice

Write *two* expressions to represent the steps needed to solve the problem. Use a letter to represent the unknown.

1. There were 189 oranges in the food storage room. This week, the zookeeper fed 8 parrots 7 oranges each. How many oranges are in the food storage room now?

Step 1: 8 × 7 = _____

Step 2: 189 − _____ = _____

2. There were 24 peppers for the tortoises. The zookeeper brought in 9 more bags with 6 peppers in each bag. How many peppers are in the storage room now?

Step 1: 9 × _____ = _____

Step 2: _____ + _____ = _____

Guided Practice

Write *two* expressions to represent the steps needed to solve the problem. Then solve.

3. The food storage room had 68 bamboo shoots. The zookeeper brought 8 more bags with 9 bamboo shoots in each. How many bamboo shoots are in the storage room now?

Step 1: _____

Step 2: _____

answer: _____

Check

Write *two* expressions to represent the steps needed to solve the problem. Then solve.

At the zoo, the food storage room had 150 small fish for the penguins. The zookeeper fed 8 penguins 12 fish each. How many fish are there in the storage room now?

Step 1: _____

Step 2: _____

answer: _____

Name _____

Solving Story Problems Involving Division

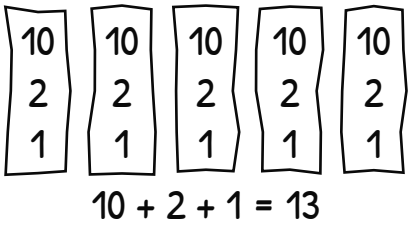
ML 4.16

Modeled Review

Name: Tristan

Solve the problem. Then write an equation to represent it.

65 apples are packed equally into 5 boxes. How many apples are in each box? Show your thinking.



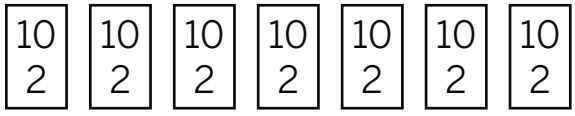
answer: 13 apples

equation: 65 ÷ 5 = 13

Guided Practice

Solve the problem. Then write an equation to represent it.

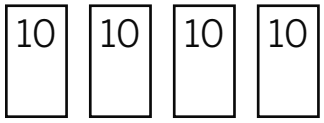
1. 84 puzzles are split equally on 7 shelves. How many puzzles are on each shelf?



answer: _____ puzzles

equation: 84 ÷ 7 = _____

2. 56 games are packed into 4 boxes. How many games are in each box?



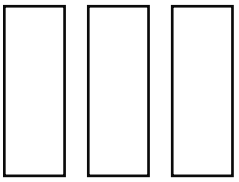
answer: _____

equation: _____

Guided Practice

Solve the problem. Then write an equation to represent it.

3. 48 blocks are shared equally between 3 bins. How many blocks are in each bin?



answer: _____

equation: _____

4. 90 toy cars are split equally between 6 bags. How many toy cars are in each bag?

answer: _____

equation: _____

5. 80 beads are shared equally between 5 bowls. How many beads are in each bowl?

answer: _____

equation: _____

Check

Solve the problem. Then write an equation to represent it.

42 markers are split equally between 3 trays. How many markers are on each tray?

answer: _____

equation: _____

Name _____

Dividing a Two-Digit by a One-Digit Number

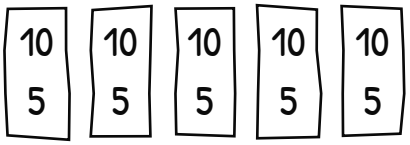
ML 4.17

Modeled Review

Name: Diego

Calculate the quotient. Show your thinking.

75 ÷ 5 = 15



10 + 5 = 15

? × 5 = 75

5 × 10 = 50

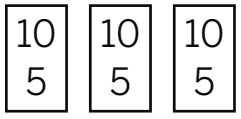
5 × 5 = 25

5 × 15 = 75

Guided Practice

Calculate the quotient. Show your thinking.

1. 45 ÷ 3 = _____

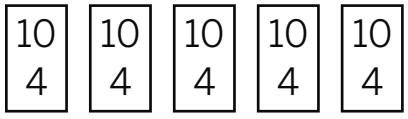


3 × 10 = _____

3 × 5 = _____

_____ + _____ = _____

2. 70 ÷ 5 = _____



5 × _____ = _____

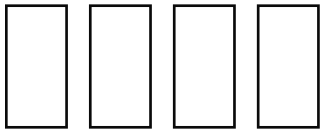
5 × _____ = _____

_____ + _____ = _____

Guided Practice

Calculate the quotient. Show your thinking.

3. 52 ÷ 4 = _____



_____ × _____ = _____

_____ × _____ = _____

_____ × _____ = _____

4. 39 ÷ 3 = _____

_____ × _____ = _____

_____ × _____ = _____

_____ × _____ = _____

5. 90 ÷ 6 = _____

6. 60 ÷ 5 = _____

Check

Calculate the quotient. Show your thinking.

72 ÷ 6 = _____

Name _____

Dividing by Decomposing a Dividend

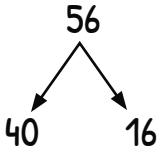
ML 4.18

Modeled Review

Name: Jack

Calculate the quotient by decomposing the dividend. Show your thinking.

56 ÷ 4 = 14



40 ÷ 4 = 10

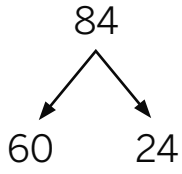
16 ÷ 4 = 4

10 + 4 = 14

Guided Practice

Calculate the quotient by completing the equations.

1. 84 ÷ 6 = _____

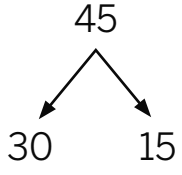


60 ÷ 6 = 10

24 ÷ 6 = _____

_____ + _____ = _____

2. 45 ÷ 3 = _____



30 ÷ 3 = _____

15 ÷ _____ = 5

_____ + _____ = _____

Guided Practice

Calculate the quotient by decomposing the dividend. Show your thinking.

3. 72 ÷ 6 = _____

72

_____ ÷ _____ = _____

_____ ÷ _____ = _____

_____ + _____ = _____

4. 42 ÷ 3 = _____

5. 48 ÷ 4 = _____

Check

Calculate the quotient by decomposing the dividend. Show your thinking.

52 ÷ 4 = _____

Name _____

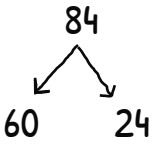
Connecting Division Strategies

ML 4.19

Modeled Review

Name: Eva

Calculate the quotient 84 ÷ 6.

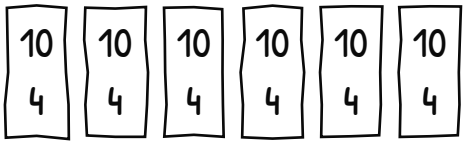


60 ÷ 6 = 10
24 ÷ 6 = 4
10 + 4 = 14

answer: 14

Name: Diego

Calculate the quotient 84 ÷ 6.



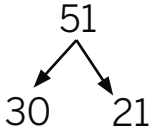
10 + 4 = 14

answer: 14

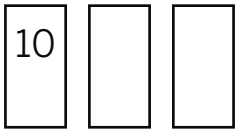
Guided Practice

Complete the strategy to find the quotient.

1. 51 ÷ 3



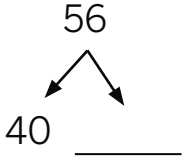
30 ÷ 3 = 10
21 ÷ 3 = 7
10 + 7 = 17



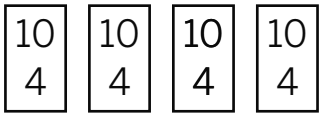
10 + ___ = ___

answer: _____

2. 56 ÷ 4



40 ÷ ____ = ____
____ ÷ ____ = ____
____ + ____ = ____



10 + 4 = 14

answer: _____

Guided Practice

Calculate the quotient using any strategy.

3. 70 ÷ 5

answer: _____

4. 48 ÷ 3

answer: _____

5. 78 ÷ 6

answer: _____

Check

Calculate the quotient 48 ÷ 4. Show your thinking.

answer: _____

Name _____

Solving Two-Step Problems With All Four Operations

ML 4.20

Modeled Review

Name: Avery

Write two expressions to represent the steps needed to solve the problem. Then, solve.

The smoothie shop has 250 strawberries. They get 4 more boxes with 23 strawberries in each. How many strawberries does the smoothie shop have now?

Step 1: 4 × 23

Step 2: 250 + 92

answer: 342 strawberries

4 × 20 = 80
4 × 3 = 12
80 + 12 = 92

250 + 92 = 342

Guided Practice

Write two expressions to represent the steps needed to solve the problem. Use a letter to represent the unknown.

1. The smoothie shop has 365 pineapple chunks. They use 320. Then, they split the rest of the pineapple chunks equally between 5 smoothies. How many pineapple chunks were put in each smoothie?

Step 1: 365 – 320 = _____

Step 2: _____ ÷ 5 = _____

2. The shop has 4 baskets of blackberries with 24 blackberries in each basket. They get a delivery with 200 more blackberries. How many blackberries does the smoothie shop have now?

Step 1: _____ × 24 = _____

Step 2: _____ + _____ = _____

Guided Practice

Write two expressions to represent the steps needed to solve the problem. Then, solve.

3. The smoothie shop has 14 bunches of 7 bananas each. Then they use 79 bananas for smoothies. How many bananas are left?

Step 1: _____

Step 2: _____

answer: _____

Check

Write two expressions to represent the steps needed to solve the problem. Then, solve.

The smoothie shop has 45 mango chunks. Then 51 more mango chunks are cut. All of the chunks are split equally between 8 smoothies. How many mango chunks are put in each smoothie?

Step 1: _____

Step 2: _____

answer: _____

Unit 5

Mini-Lessons

Name _____

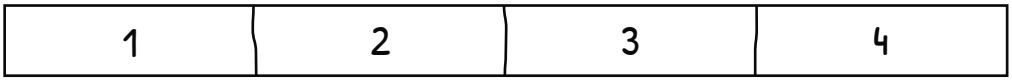
Partitioning a Whole Into Equal Parts

ML 5.02

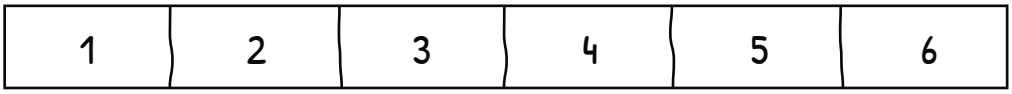
Modeled Review

Name: Jada

1. Partition the whole to represent fourths.



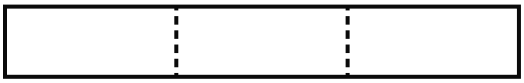
2. Partition the whole to represent sixths.



Guided Practice

Partition each rectangle into the given fraction. Then fill in the missing information.

1. Partition the whole into thirds.



- ___ equal parts
- 3 thirds in the whole
- Each part is one third

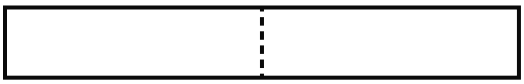
2. Partition the whole into sixths.

- 6 equal parts
- ___ sixths in the whole
- Each part is one _____

Guided Practice

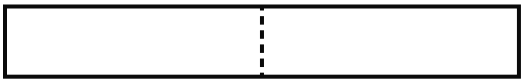
Partition each rectangle into the given fraction. Then fill in the missing information.

3. Partition the whole into halves.



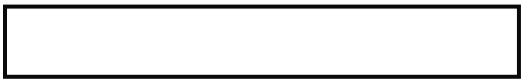
- ___ equal parts
- ___ halves in the whole
- Each part is one _____

4. Partition the whole into fourths.



- ___ equal parts
- ___ fourths in the whole
- Each part is one _____

5. Partition the whole into eighths.



- ___ equal parts
- ___ eighths in the whole
- Each part is one _____

Check

Partition each rectangle into the given fraction.

1. Partition the whole to represent thirds.

2. Partition the whole to represent fourths.

Name _____

Identifying Unit Fractions

ML 5.03

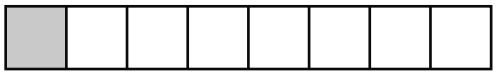
Modeled Review

Name: Dylan

Each shape represents one whole. Write the fraction of the whole that is shaded.

1. 

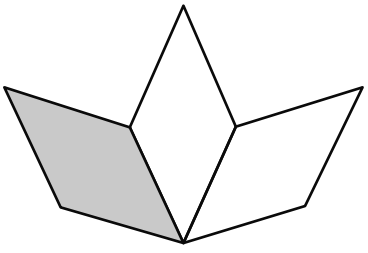
$\frac{1}{2}$

2. 

$\frac{1}{8}$

Guided Practice

1. Use the partitioned shape to complete the missing information.

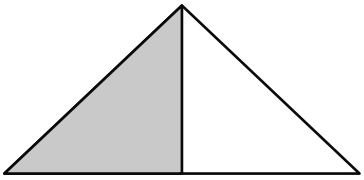


- ___ equal parts
- Each part is one third
- The unit fraction $\frac{1}{3}$

Guided Practice

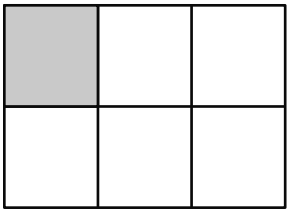
Use the partitioned shape to complete the missing information.

2.



- 2 equal parts
- Each part is one _____
- The unit fraction is _____

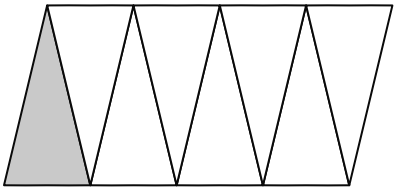
3.



- ___ equal parts
- Each part is one _____
- The unit fraction is _____

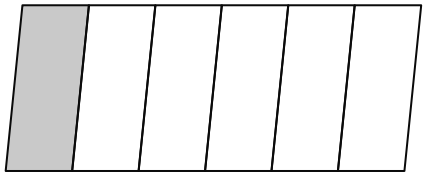
Each shape represents one whole. Write the fraction of the whole that is shaded.

4.



_____

5.

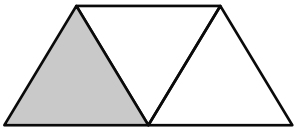


_____

Check

Each shape represents one whole. Write the fraction of the whole that is shaded.

1.



_____

2.

_____

Name _____

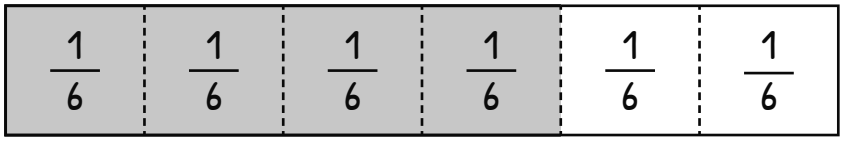
Identifying Non-Unit Fractions

ML 5.04

Modeled Review

Name: Dylan

The rectangle represents one whole. What fraction of the rectangle is shaded? Explain your thinking.

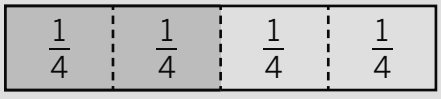
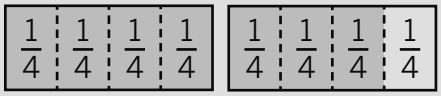


answer: $\frac{4}{6}$

4 parts are shaded.

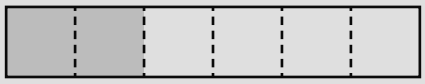
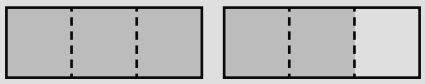
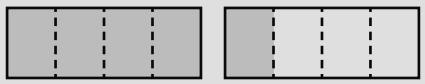
Guided Practice

1. Use the diagrams to complete the table. Each rectangle represents one whole.

Diagram	Unit fraction	Number of shaded parts	Fraction that is shaded
			$\frac{2}{4}$
	$\frac{1}{4}$		$\frac{7}{4}$

Guided Practice

2. Use the diagrams to complete the table. Each rectangle represents one whole.

Diagram	Unit fraction	Number of shaded parts	Fraction that is shaded
	$\frac{1}{8}$		
			
			
			
			

Check

The rectangle represents one whole. What fraction of the rectangle is shaded? Explain your thinking.

answer: _____ _____

Name _____

Representing Non-Unit Fractions

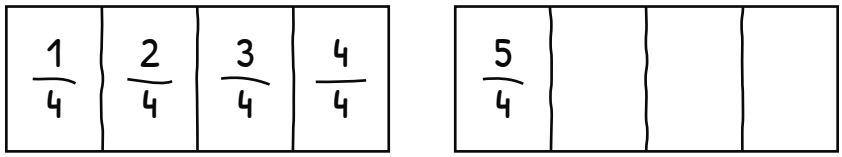
ML 5.05

Modeled Review

Name: Maya

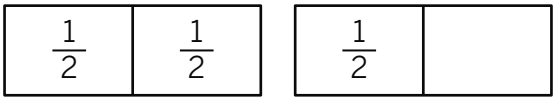
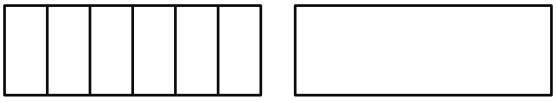
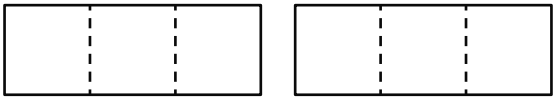
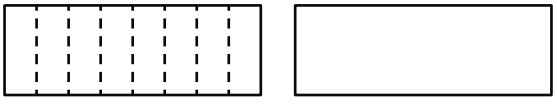
Each rectangle represents one whole.

Use the diagram to represent $\frac{5}{4}$.



Guided Practice

1. Identify the unit fraction. Then represent each non-unit fraction on the diagram. Each rectangle represents one whole.

Diagram	Unit fraction	Fraction that is shaded
	$\frac{1}{2}$	$\frac{3}{2}$
		$\frac{2}{6}$
		$\frac{4}{3}$
		$\frac{4}{8}$

Guided Practice

2. Identify the unit fraction. Then represent each non-unit fraction on the diagram. Each rectangle represents one whole.

Diagram	Unit fraction	Fraction that is shaded
		$\frac{6}{4}$
		$\frac{2}{2}$
		$\frac{2}{3}$
		$\frac{7}{4}$
		$\frac{8}{6}$

Check

Each rectangle represents one whole.

Use the diagram to represent $\frac{5}{3}$.

Name _____

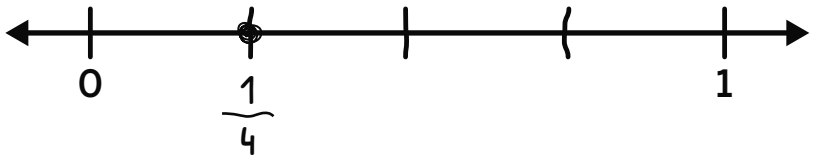
Locating Unit Fractions on a Number Line

ML 5.06

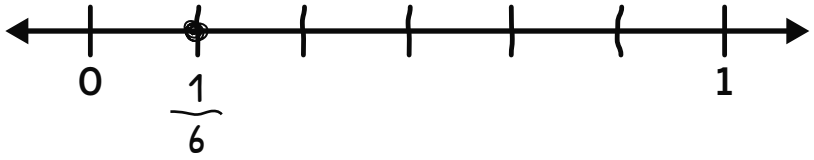
Modeled Review

Name: Clare

1. Locate and label $\frac{1}{4}$ on the number line.

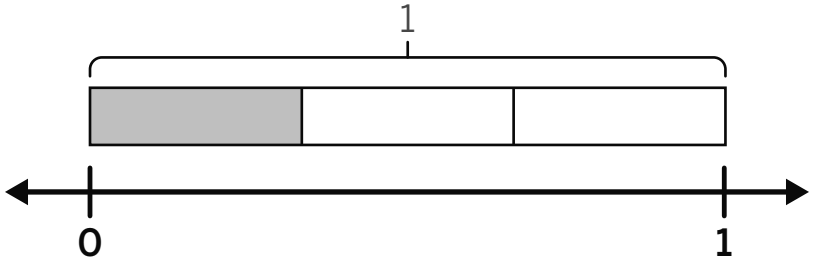


2. Locate and label $\frac{1}{6}$ on the number line.



Guided Practice

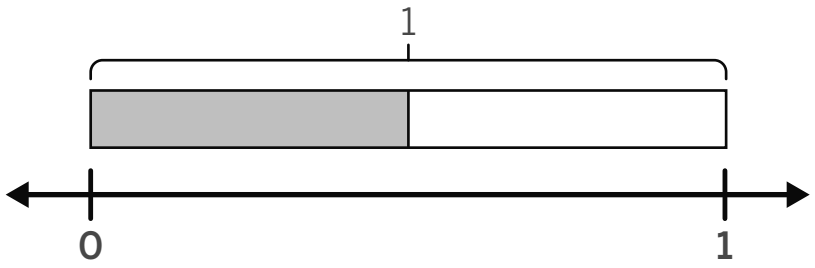
1. Locate and label $\frac{1}{3}$ on the number line.



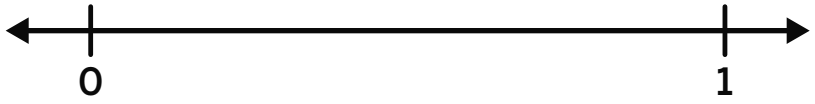
Guided Practice

Locate and label each unit fraction on the number line.

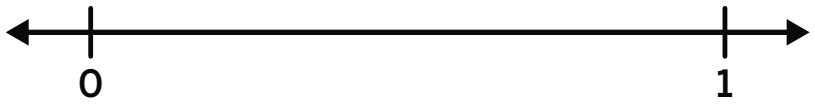
2. $\frac{1}{2}$



3. $\frac{1}{4}$



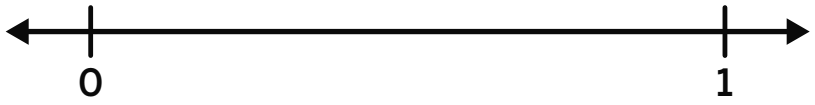
4. $\frac{1}{8}$



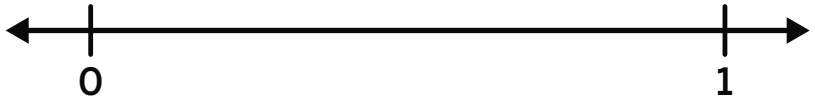
Check

Locate and label each unit fraction on the number line.

1. $\frac{1}{3}$



2. $\frac{1}{6}$



Name _____

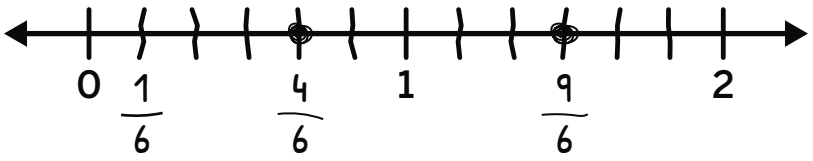
Locating Non-Unit Fractions on a Number Line

ML 5.07

Modeled Review

Name: Tristan

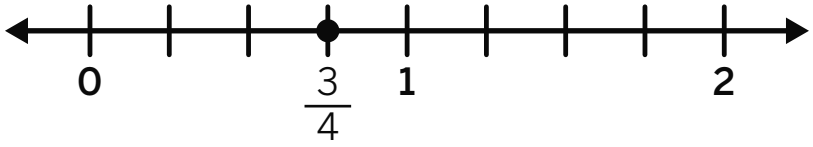
Locate and label $\frac{4}{6}$ and $\frac{9}{6}$ on the number line.



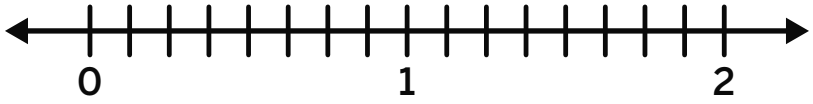
Guided Practice

Locate and label each fraction on the number line.

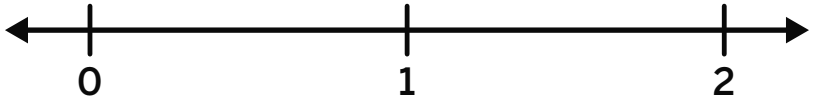
1. $\frac{3}{4}$ and $\frac{7}{4}$



2. $\frac{4}{8}$ and $\frac{10}{8}$



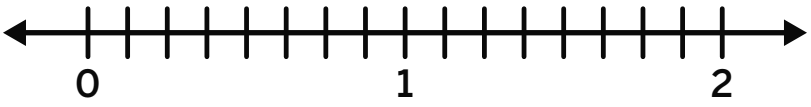
3. $\frac{1}{2}$ and $\frac{3}{2}$



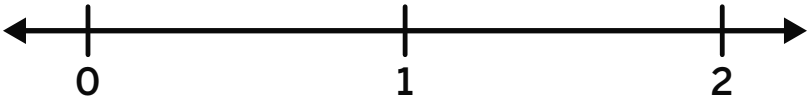
Guided Practice

Locate and label each fraction on the number line.

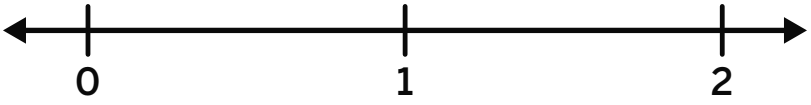
4. $\frac{2}{8}$ and $\frac{15}{8}$



5. $\frac{2}{3}$ and $\frac{5}{3}$

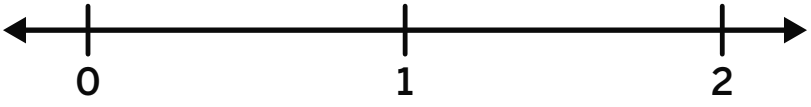


6. $\frac{3}{6}$ and $\frac{7}{6}$



Check

Locate and label $\frac{2}{4}$ and $\frac{5}{4}$ on the number line.



Name _____

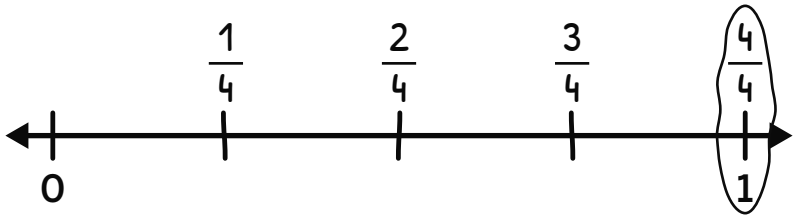
Identifying Fractions Equal to 1

ML 5.08

Modeled Review

Name: Avery

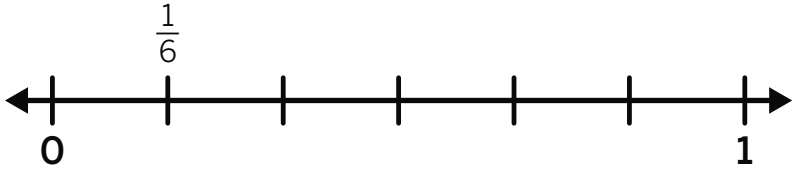
Use the number line to show that $\frac{4}{4}$ equals 1.



Guided Practice

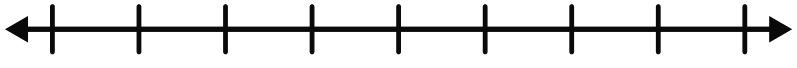
Select the fraction that is equal to 1. Use the number line if it is helpful.

1.



A. $\frac{2}{3}$ **B.** $\frac{8}{6}$ **C.** $\frac{6}{6}$ **D.** $\frac{1}{2}$

2.

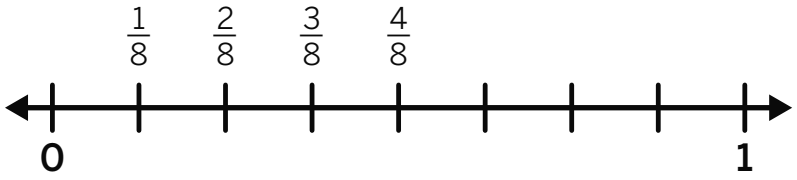


A. $\frac{1}{6}$ **B.** $\frac{8}{8}$ **C.** $\frac{3}{4}$ **D.** $\frac{1}{3}$

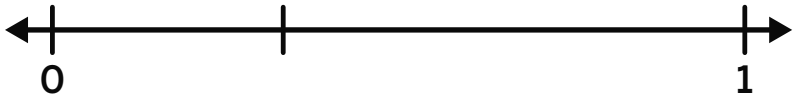
Guided Practice

Use the unit fraction to locate and label the fractions equal to 1 on each number line

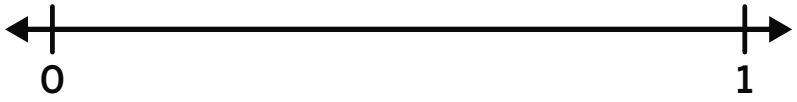
3. $\frac{1}{8}$



4. $\frac{1}{3}$

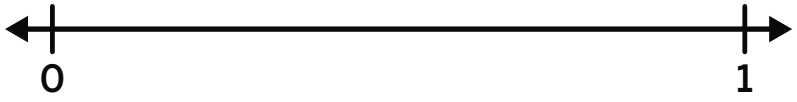


5. $\frac{1}{2}$

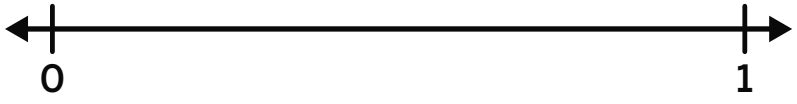


Check

1. Use the number line to show that $\frac{6}{6}$ equals 1.



2. Use the number line to show that $\frac{4}{4}$ equals 1.



Name _____

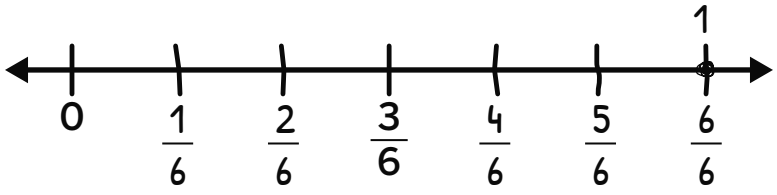
Locating Fractions on a Number Line

ML 5.09

Modeled Review

Name: Kai

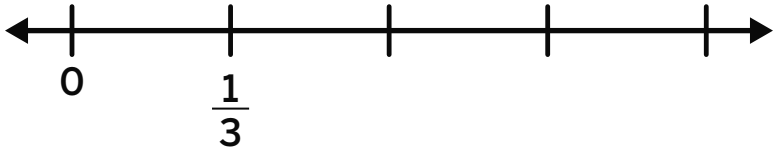
Locate 1 on the number line. Label it with a whole number and a fraction.



Guided Practice

Locate 1 on each number line. Label it with a whole number and a fraction.

1.

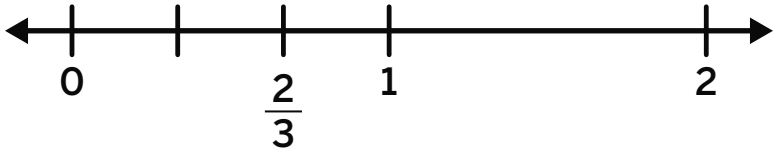


2.

Guided Practice

Locate and label the given numbers on each number line.

3. $\frac{5}{3}$



4. $\frac{4}{6}$ and 1

5. 1 and $\frac{6}{4}$

Check

Locate 1 on the number line. Label it with a whole number and a fraction.

Name _____

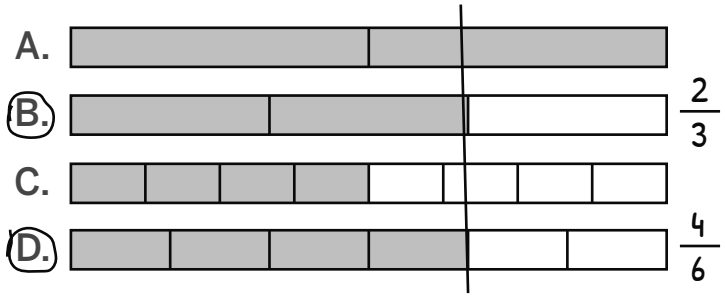
Identifying Equivalent Fractions

ML 5.10

Modeled Review

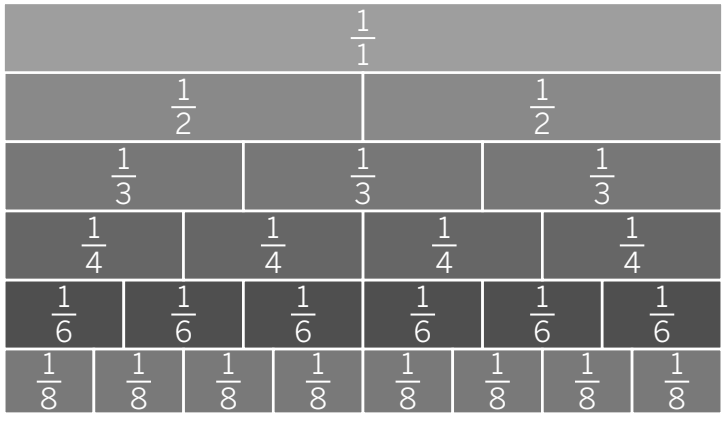
Name: Diego

Each rectangle represents one whole. Select the two rectangles in which the total shaded areas represent equivalent fractions.



Guided Practice

Use the diagram to identify all of the equivalent fractions.



1. 1 is equivalent to $\frac{2}{2}$, $\frac{3}{3}$, ___, ___, ___

2. $\frac{1}{2}$ is equivalent to _____

3. $\frac{1}{3}$ is equivalent to _____

4. $\frac{1}{4}$ is equivalent to _____

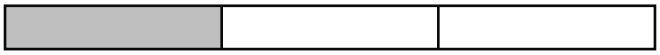
5. $\frac{4}{6}$ is equivalent to _____

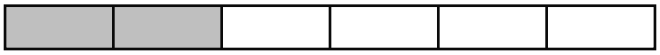
6. $\frac{3}{4}$ is equivalent to _____

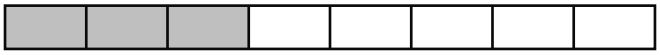
Guided Practice

Each rectangle represents one whole. Select the *two* rectangles in which the total shaded areas represent equivalent fractions.

7. A. 

   B. 

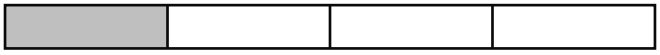
   C. 

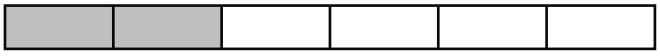
   D. 

8. A. 

   B. 

   C. 

   D. 

9. A. 

   B. 

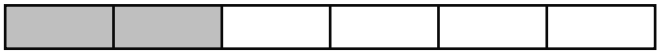
   C. 

   D. 

Check

Each rectangle represents one whole. Select the *two* rectangles in which the total shaded areas represent equivalent fractions.

A. 

B. 

C. 

D. 

Name _____

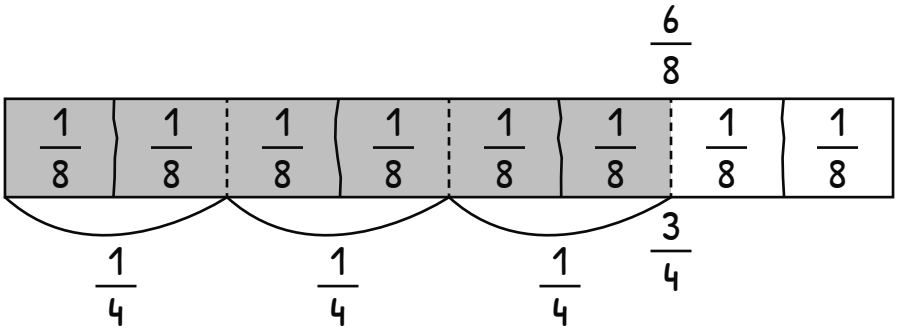
Writing Equivalent Fractions

ML 5.11

Modeled Review

Name: Priya

The rectangle represents one whole. Write *two* different fractions to represent the total shaded area of the diagram.

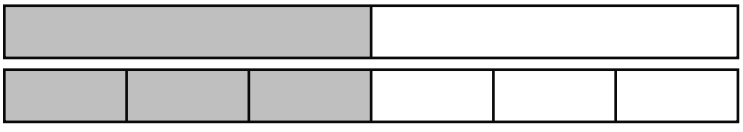


equivalent fractions: $\frac{3}{4}$ and $\frac{6}{8}$

Guided Practice

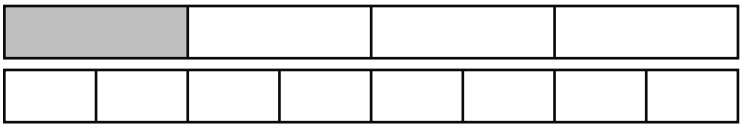
Each rectangle represents one whole. Find the equivalent fractions by shading the diagrams.

1.



equivalent fractions: $\frac{1}{2}$ and ____

2.

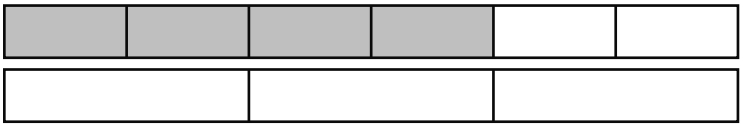


equivalent fractions: ____ and ____

Guided Practice

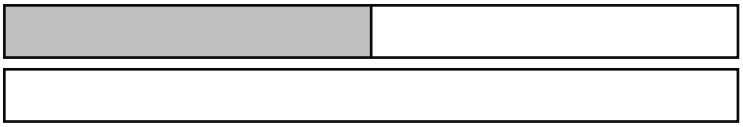
Each rectangle represents one whole. Find the equivalent fractions by partitioning and shading the diagrams.

3.



equivalent fractions: ___ and ___

4.



equivalent fractions: ___ and ___

The rectangle represents one whole. Write *two* different fractions to represent the total shaded area of the diagram.

5.

equivalent fractions: ___ and ___

Check

The rectangle represents one whole. Write *two* different fractions to represent the total shaded area of the diagram.

equivalent fractions: ___ and ___

Name _____

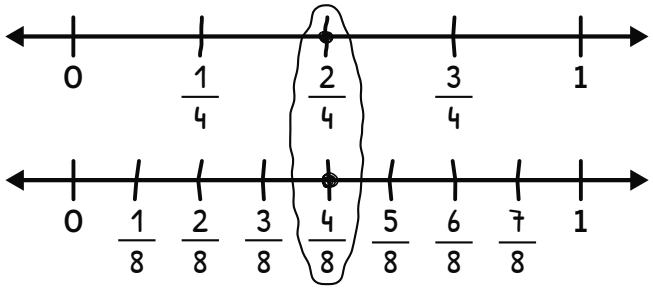
Determining Equivalent Fractions

ML 5.12

Modeled Review

Name: Han

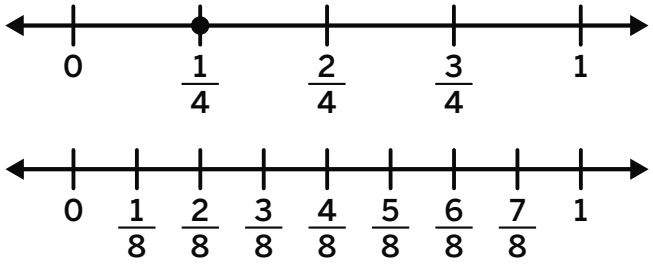
Use the number lines to show that $\frac{2}{4}$ is equivalent to $\frac{4}{8}$.



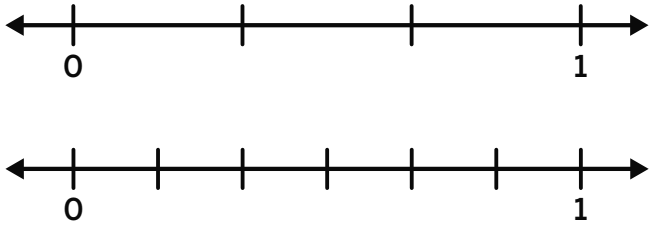
Guided Practice

Use the number lines to find equivalent fractions.

1. equivalent fractions: $\frac{1}{4}$ and _____



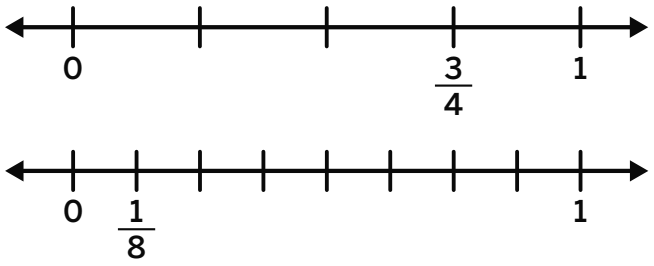
2. equivalent fractions: $\frac{1}{3}$ and _____



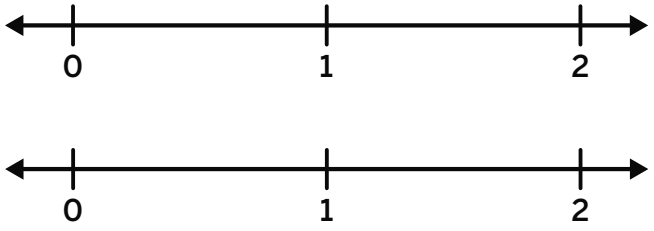
Guided Practice

Use the number lines to find equivalent fractions.

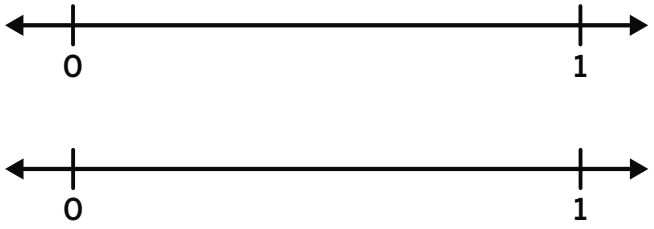
3. $\frac{3}{4} =$ _____



4. $\frac{3}{2} =$ _____

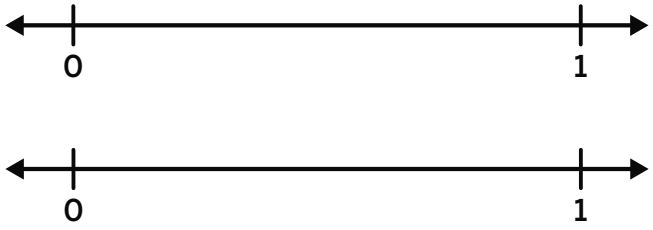


5. $\frac{2}{3} =$ _____



Check

Use the number lines to show that $\frac{1}{2}$ is equivalent to $\frac{2}{4}$.



Name _____

Identifying Fractions Equivalent to Whole Numbers

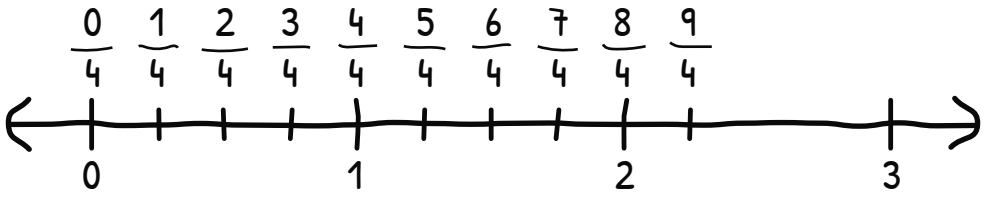
ML 5.13

Modeled Review

Name: Santiago

Is $\frac{9}{4}$ equivalent to a whole number? Show your thinking.

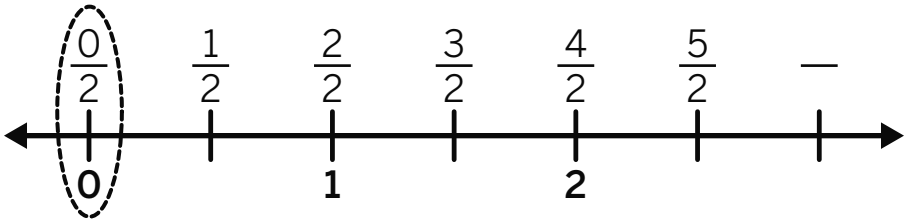
yes or (no)



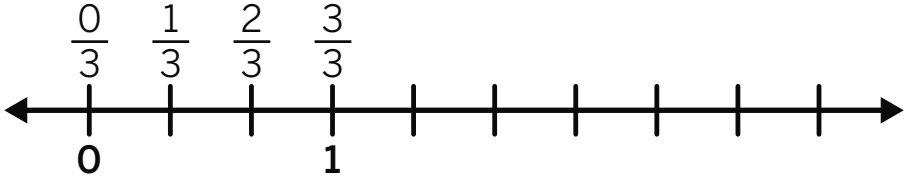
Guided Practice

Label the tick marks and circle the fractions that are also whole numbers.

1. Count by $\frac{1}{2}$



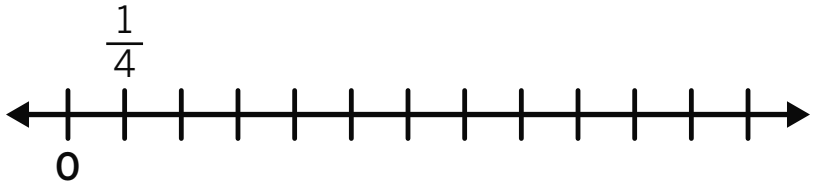
2. Count by $\frac{1}{3}$



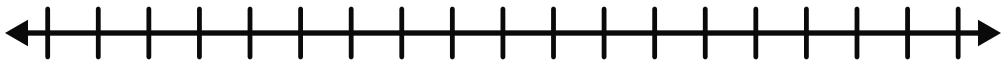
Guided Practice

For Problems 3 and 4, label the tick marks and circle the fractions that are also whole numbers.

3. Count by $\frac{1}{4}$

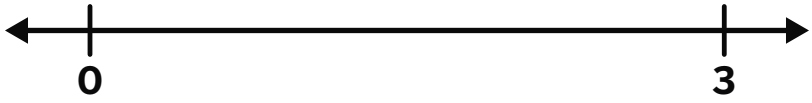


4. Count by $\frac{1}{6}$



5. Is $\frac{6}{2}$ equivalent to a whole number? Show your thinking.

yes or no



Check

Is $\frac{7}{3}$ equivalent to a whole number? Show your thinking.

yes or no

Name _____

Writing Whole Numbers as Fractions

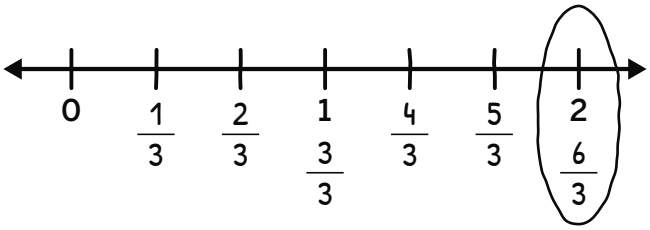
ML 5.14

Modeled Review

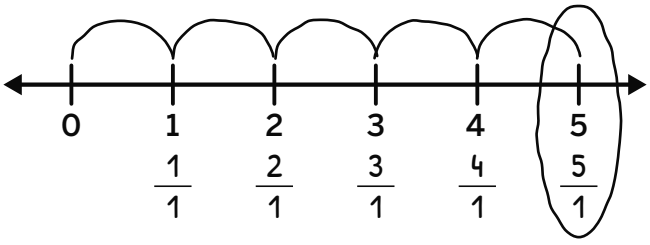
Name: Avery

Use the number lines to show the numbers are equivalent.

1. Show why $2 = \frac{6}{3}$.



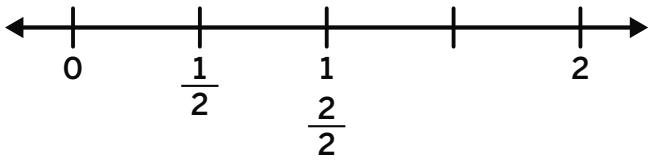
2. Show why $5 = \frac{5}{1}$.



Guided Practice

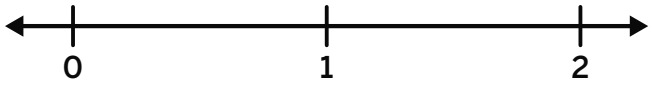
Use each number line to find the equivalent fraction.

1.



$2 = \frac{\quad}{2}$

2.

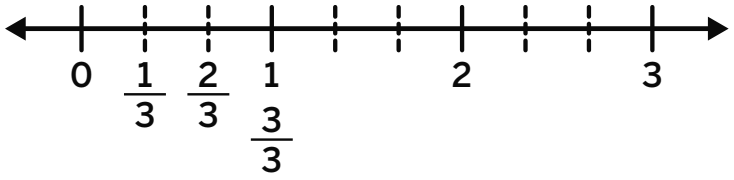


$2 = \frac{\quad}{1}$

Guided Practice

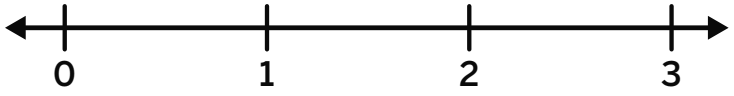
Use each number line to find the equivalent fraction.

3.



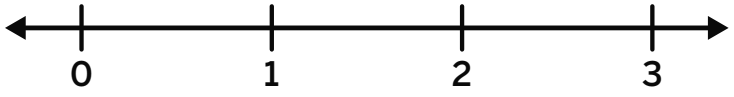
$3 = \frac{\quad}{3}$

4.



$3 = \frac{\quad}{4}$

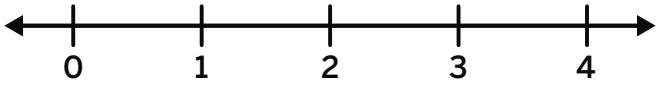
5.



$3 = \frac{\quad}{1}$

Check

Express the whole number 4 as a fraction in two different ways. Use the number lines if it is helpful.



answer: _____

Name _____

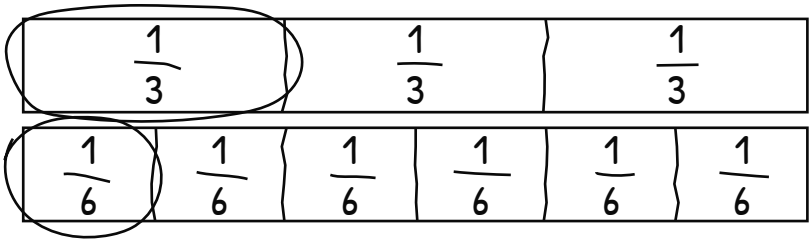
Comparing Unit Fractions

ML 5.15

Modeled Review

Name: Maya

Each rectangle represents one whole. Which unit fraction is *greater:* $\frac{1}{6}$ or $\frac{1}{3}$? Show your thinking.

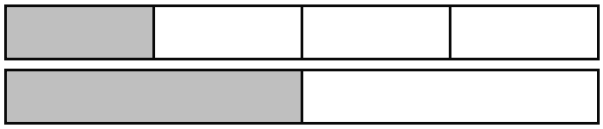


answer: 1/3

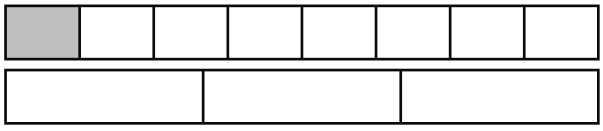
Guided Practice

Each rectangle represents one whole. Partition and shade the fraction strips to find the *greater* fraction. Circle your answer.

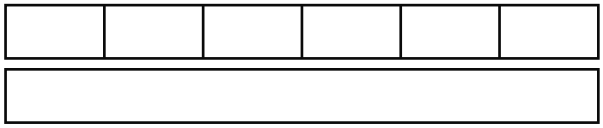
1. Which is *greater*: $\frac{1}{4}$ or $\frac{1}{2}$?



2. Which is *greater*: $\frac{1}{3}$ or $\frac{1}{8}$?



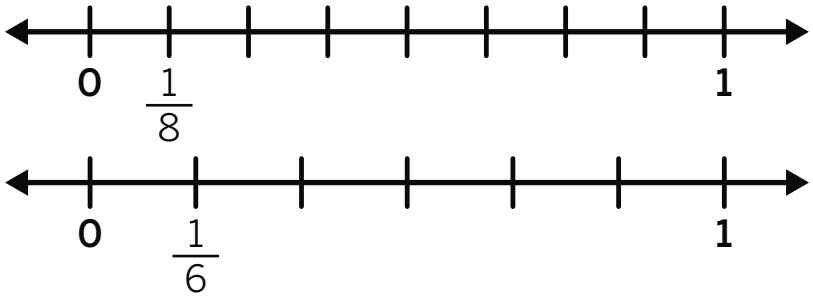
3. Which is *greater*: $\frac{1}{6}$ or $\frac{1}{2}$?



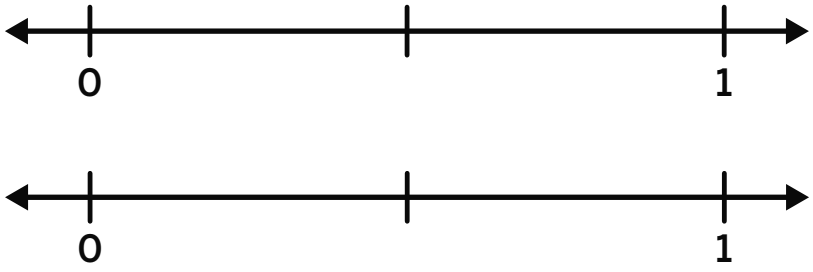
Guided Practice

Partition and label the number lines to find the *greater* fraction. Circle your answer.

4. Which is *greater*: $\frac{1}{8}$ or $\frac{1}{6}$?



5. Which is *greater*: $\frac{1}{4}$ or $\frac{1}{6}$?



Check

Each rectangle represents one whole. Which unit fraction is *greater:* $\frac{1}{4}$ or $\frac{1}{3}$? Show your thinking.

answer: _____

Name _____

Comparing Fractions With the Same Numerator

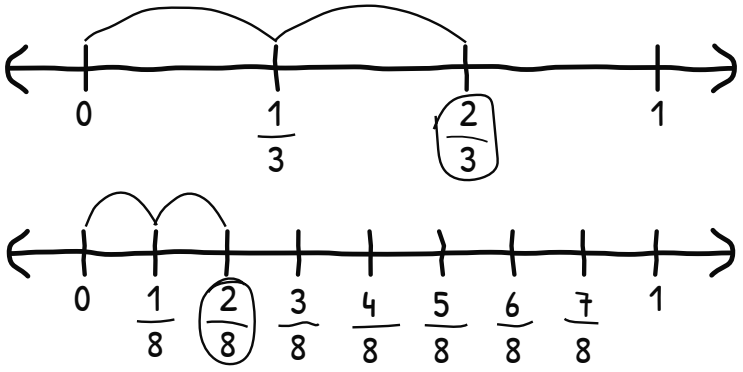
ML 5.16

Modeled Review

Name: Jack

Complete the comparison using < or >.

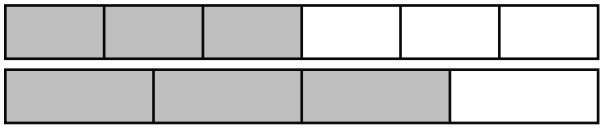
$\frac{2}{8} < \frac{2}{3}$



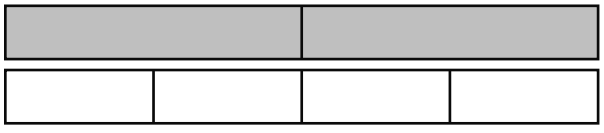
Guided Practice

Each rectangle represents one whole. Partition and shade each diagram to represent the given fractions. Complete the comparison using < or >.

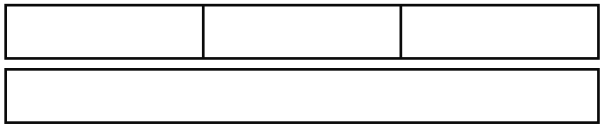
1. $\frac{3}{6}$ ____ $\frac{3}{4}$



2. $\frac{2}{2}$ ____ $\frac{2}{4}$



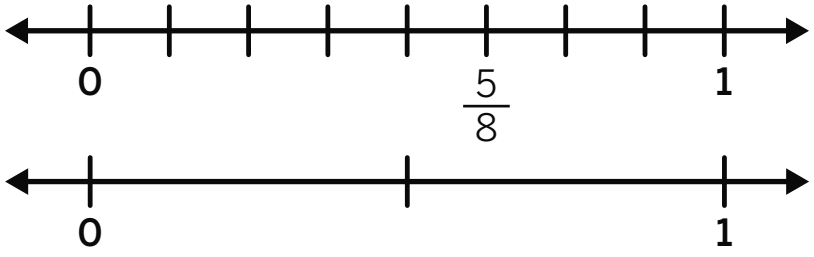
3. $\frac{1}{3}$ ____ $\frac{1}{2}$



Guided Practice

Complete the comparison using < or >.

4. $\frac{5}{8} \_\_\_\_ \frac{5}{6}$



5. $\frac{3}{4} \_\_\_\_ \frac{3}{8}$

Check

Complete the comparison using < or >.

$\frac{2}{3} \_\_\_\_ \frac{2}{6}$

Name _____

Comparing Fractions With the Same Denominator

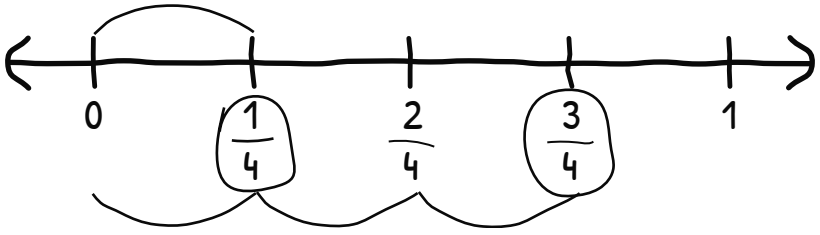
ML 5.17

Modeled Review

Name: Jada

Complete the comparison using < or >. Show your thinking.

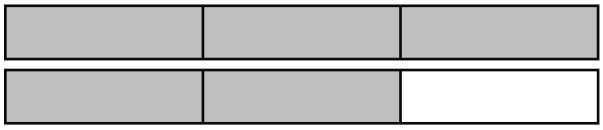
$\frac{1}{4} < \frac{3}{4}$



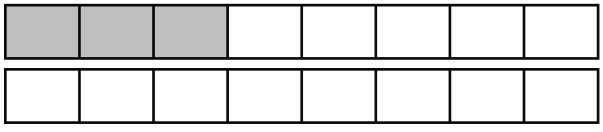
Guided Practice

Each rectangle represents one whole. Partition and shade each diagram to represent the given fractions. Complete the comparison using < or >.

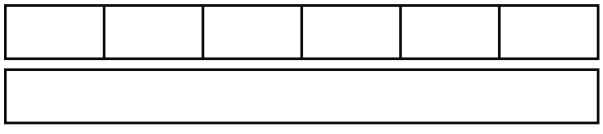
1. $\frac{3}{3}$ ____ $\frac{2}{3}$



2. $\frac{3}{8}$ ____ $\frac{7}{8}$



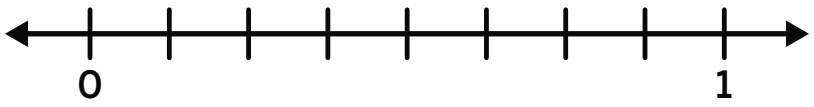
3. $\frac{4}{6}$ ____ $\frac{5}{6}$



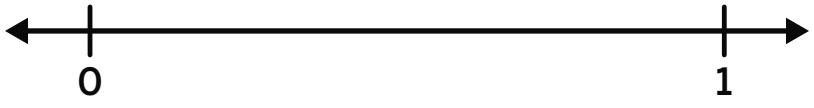
Guided Practice

Complete the comparison using < or >.

4. $\frac{6}{8}$ ____ $\frac{3}{8}$



5. $\frac{2}{4}$ ____ $\frac{3}{4}$



6. $\frac{2}{3}$ ____ $\frac{1}{3}$

Check

Complete the comparison using < or >. Show your thinking.

$\frac{4}{6}$ ____ $\frac{2}{6}$

Unit 6

Mini-Lessons

Name _____

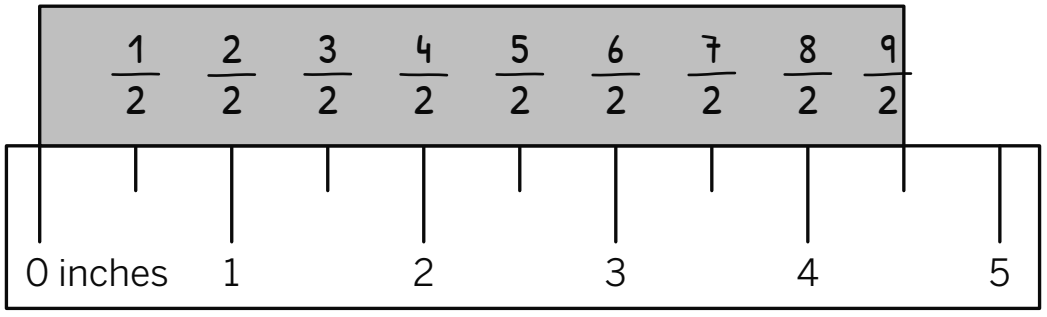
Measuring Lengths in Halves of an Inch

ML 6.02

Modeled Review

Name: Maya

Record *two* ways to write the length of the rectangle, in half inches and inches.

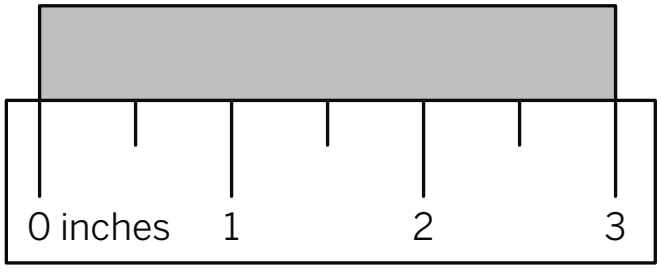


$\frac{9}{2}$ = $4\frac{1}{2}$ inches

Guided Practice

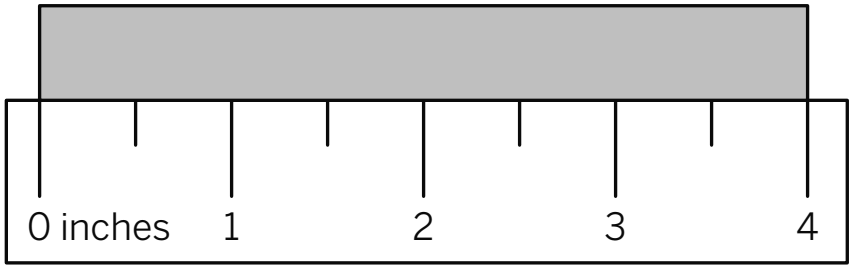
Record *two* ways to write the length of the rectangle, in half inches and inches.

1.



$\frac{6}{2}$ = ___ inches

2.

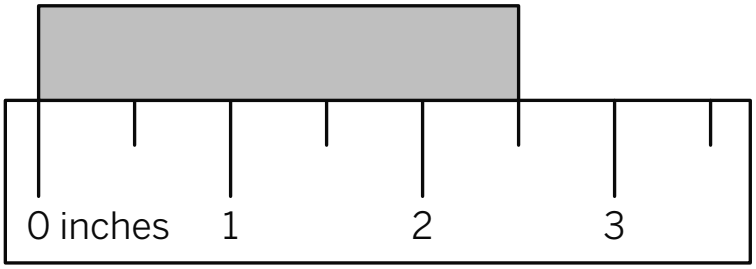


$\frac{8}{2}$ = 4 inches

Guided Practice

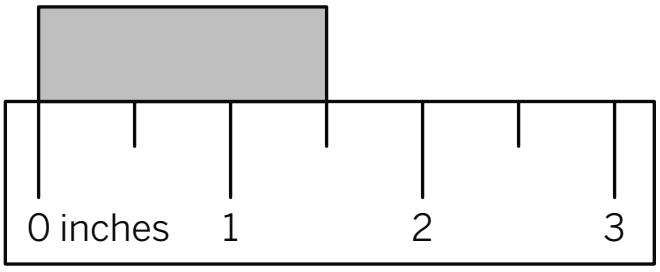
Record *two* ways to write the length of the rectangle, in half inches and inches.

3.



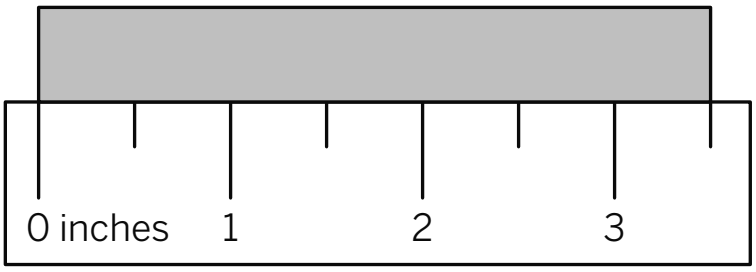
$\frac{\quad}{2}$ = $2\frac{\quad}{2}$ inches

4.



____ = ____ inches

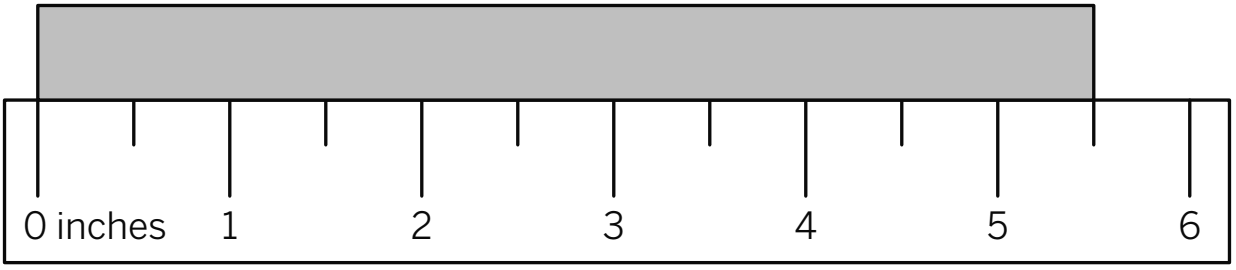
5.



____ = ____ inches

Check

Record *two* ways to write the length of the rectangle, in half inches and inches.



____ = ____ inches

Name _____

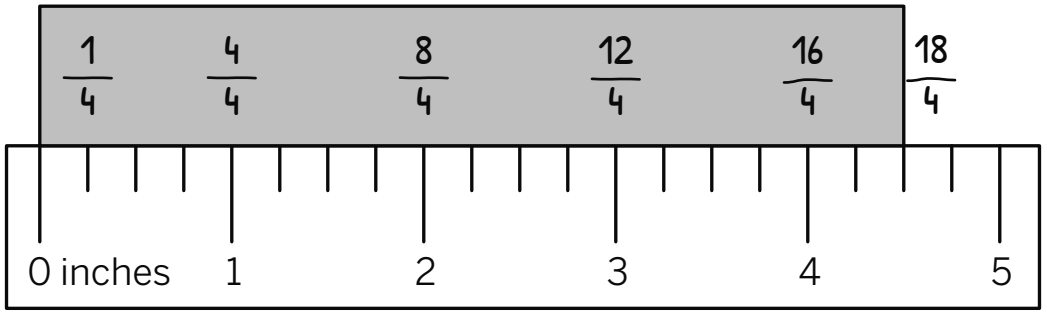
Measuring Lengths in Fourths of an Inch

ML 6.03

Modeled Review

Name: Dylan

Record *two* ways to write the length of the rectangle, in fourths of an inch and inches.

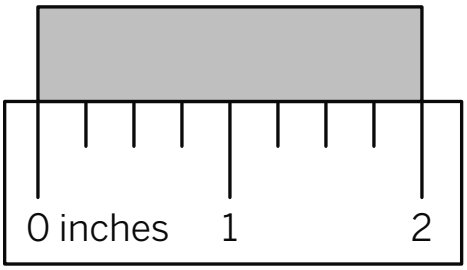


$\frac{18}{4}$ = $4\frac{2}{4}$ inches

Guided Practice

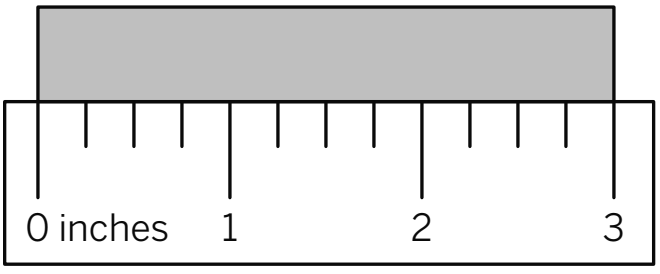
Record *two* ways to write the length of the rectangle, in fourths of an inch and inches.

1.



$\frac{8}{4}$ = _____ inches

2.

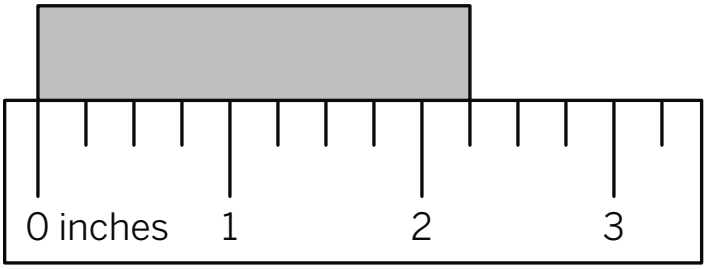


$\frac{\quad}{4}$ = 3 inches

Guided Practice

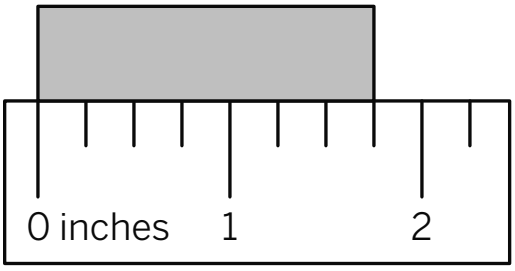
Record *two* ways to write the length of the rectangle, in fourths of an inch and inches.

3.



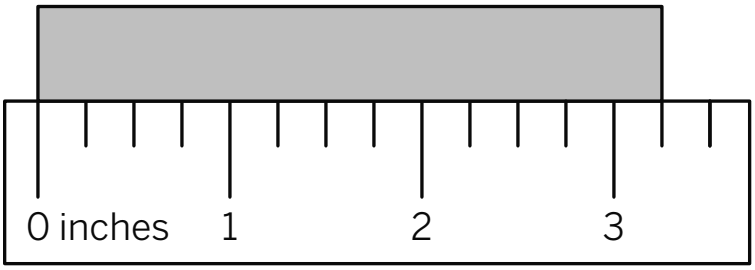
____ = $\frac{2}{4}$ inches

4.



____ = ____ inches

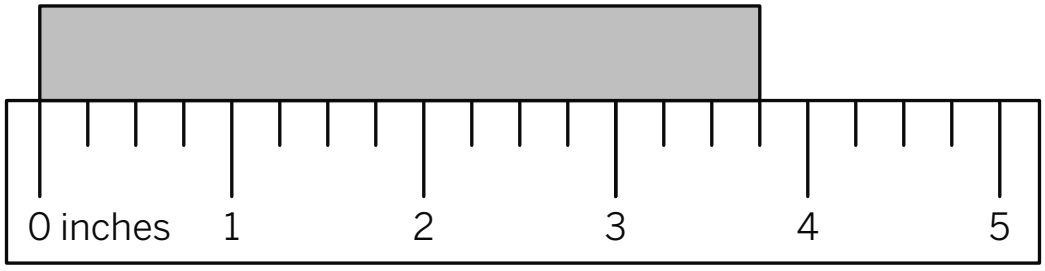
5.



____ = ____ inches

Check

Record *two* ways to write the length of the rectangle, in fourths of an inch and inches.



____ = ____ inches

Name _____

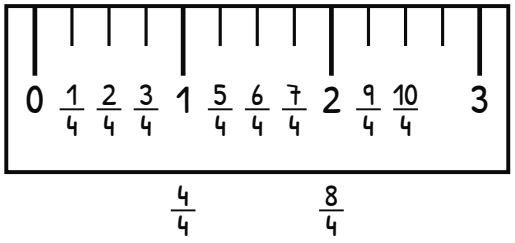
Measuring Lengths in Halves and Fourths of an Inch

ML 6.04

Modeled Review

Name: Diego

Record the length in fourths of an inch. Then record an equivalent length.



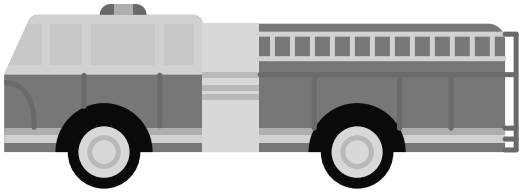
length: $\frac{10}{4}$ inches

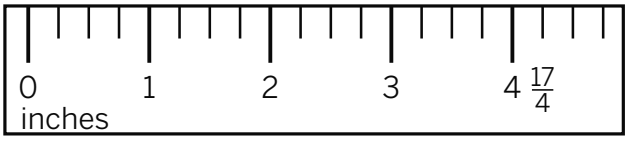
equivalent length: $2\frac{2}{4}$ inches

Guided Practice

Record an equivalent length.

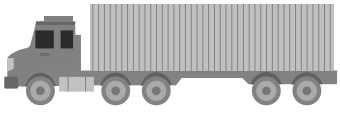
1.

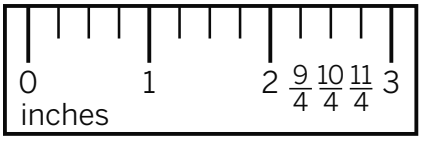




$\frac{17}{4} =$ _____

2.



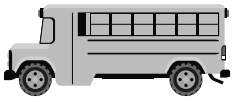


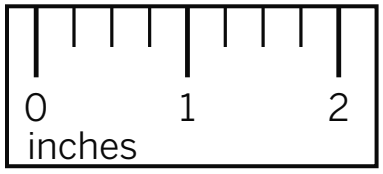
_____ $= 2\frac{3}{4}$

Guided Practice

Record the length in fourths of an inch. Then record an equivalent length.

3.

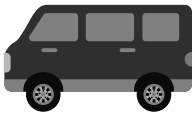


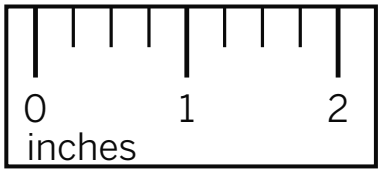


length: _____

equivalent length: _____

4.

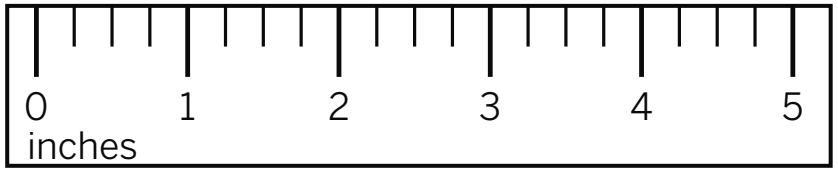




length: _____

equivalent length: _____

5.

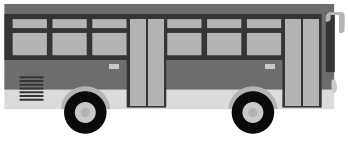


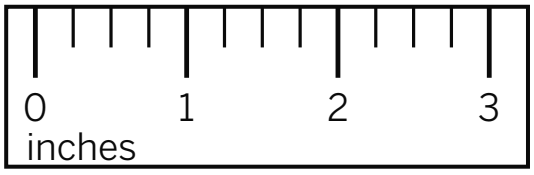
length: _____

equivalent length: _____

Check

Record the length in fourths of an inch. Then record an equivalent length.





length: _____

equivalent length: _____

Name _____

Generating Line Plots

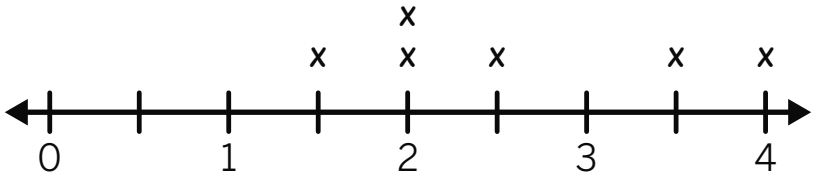
ML 6.05

Modeled Review

Name: Eva

Create a line plot to represent the data.

~~$3\frac{1}{2}$~~	~~2~~	~~$1\frac{1}{2}$~~	~~$2\frac{1}{2}$~~	~~2~~	~~4~~



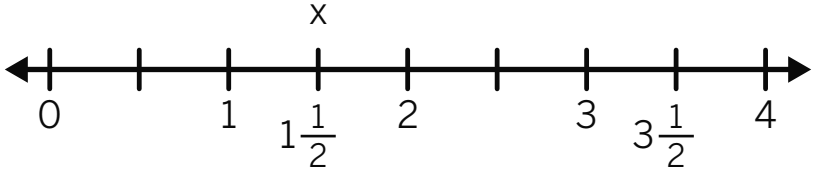
lengths of stickers (inches)

Guided Practice

Create a line plot with each set of given data.

1. This list shows the lengths of caterpillars in inches.

~~$1\frac{1}{2}$~~	2	$3\frac{1}{2}$	4



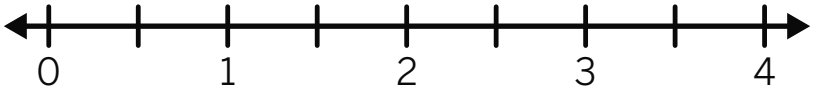
lengths of caterpillars (inches)

Guided Practice

Create a line plot with each set of given data.

2. This list shows the lengths of different bugs in inches.

$1\frac{1}{2}$	$3\frac{1}{2}$	4	2	4



lengths of bugs (inches)

3. This list shows the lengths of student pencils in inches.

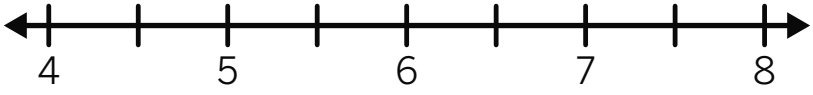
$7\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{1}{2}$	6	4	$7\frac{1}{2}$

lengths of pencils (inches)

Check

Create a line plot to represent the data.

$6\frac{1}{2}$	$4\frac{1}{2}$	7	$5\frac{1}{2}$	$5\frac{1}{2}$	7



lengths of string (inches)

Name _____

Displaying Measurement Data on a Line Plot

ML 6.06

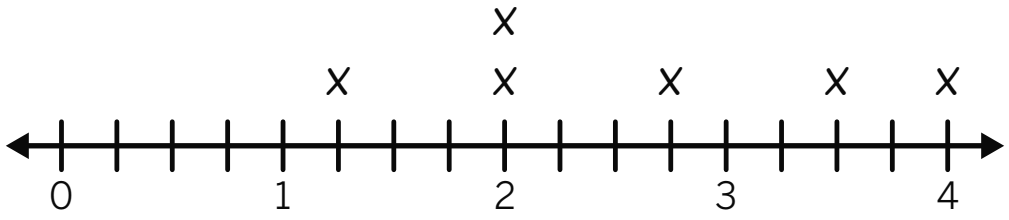
Modeled Review

Name: Jada

Use the data to complete the line plot.

This list shows the lengths of sticks in inches.

$3\frac{1}{2}$	$1\frac{1}{4}$	4	2	$2\frac{3}{4}$	2



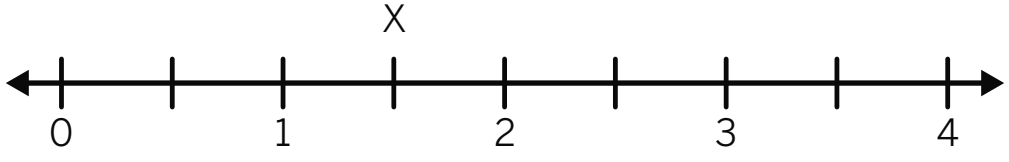
lengths of sticks (inches)

Guided Practice

Make a line plot with the set of given data.

1. This list shows the lengths of rocks in inches.

$1\frac{1}{2}$	2	$3\frac{2}{4}$	$2\frac{1}{2}$	$1\frac{1}{2}$	3



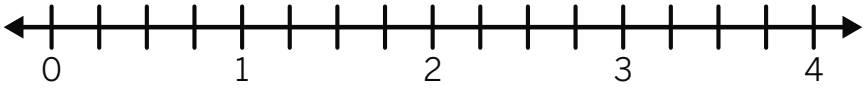
lengths of rocks (inches)

Guided Practice

Make a line plot with each set of given data.

2. This list shows the lengths of worms in inches.

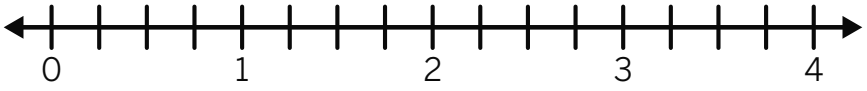
3	1	$2\frac{1}{4}$	$2\frac{1}{2}$	$1\frac{2}{4}$	$2\frac{2}{4}$



_____ (inches)

3. This list shows the lengths of feathers in inches.

$3\frac{2}{4}$	$3\frac{3}{4}$	4	$2\frac{1}{2}$	$1\frac{3}{4}$	4



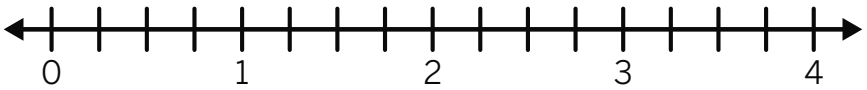
_____

Check

Use the data to complete the line plot.

This list shows the lengths of pine cones in inches.

$\frac{3}{4}$	$1\frac{2}{4}$	$3\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{2}$



_____

Name _____

Estimating Weight in Grams and Kilograms

ML 6.07

Modeled Review

Name: Santiago

1. Circle *two* objects that have a weight of about 1 gram.

raisin

brick

mango

birthday candle

about a paperclip

2. Circle *two* objects that have a weight of about 1 kilogram.

almond

bag of cat food

mini bell pepper

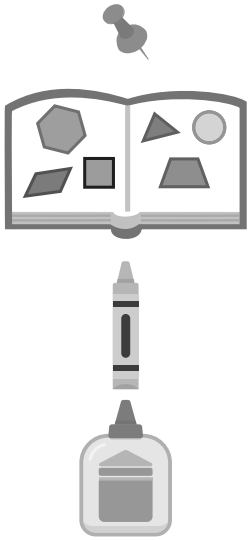
canteloupe

about a textbook

Guided Practice

1. Estimate the weight by matching the picture to the correct measurement.

A paperclip is about 1 gram.



1 kilogram

10 grams

100 grams

1 gram

Guided Practice

Estimate the weight of each item by circling grams or kilograms.

2. A kiwi weighs about 50 (grams / kilograms).

3. A vacuum cleaner weighs about 5 (grams / kilograms)

4. A container of yogurt weighs about 100 (grams / kilograms).

5. A car tire weighs about 10 (grams / kilograms).

6. A slice of bread weighs about 20 (grams / kilograms).

7. A large dog weighs about 50 (grams / kilograms).

8. A jar of peanut butter weighs about 500 (grams / kilograms).

9. A large pizza weighs about 1 (gram / kilogram).

Check

1. Circle *two* objects that have a weight of about 1 gram.

rubberband	turtle
one earring	flower in a pot

2. Circle *two* objects that have a weight of about 1 kilogram.

hammer	small blender
small ball of yarn	bag of marshmallows

Name _____

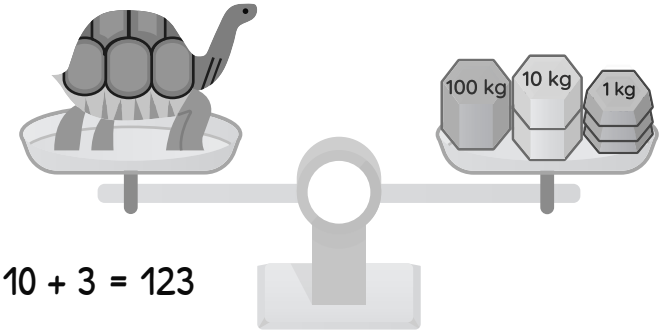
Measuring Weight in Grams and Kilograms

ML 6.08

Modeled Review

Name: Priya

What is the weight of the giant tortoise?



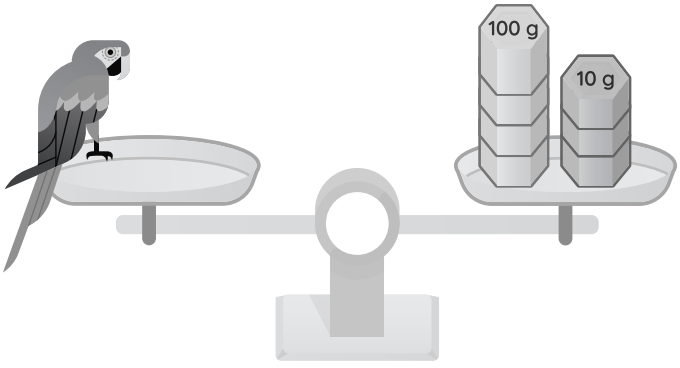
100 + 10 + 10 + 3 = 123

The giant tortoise weighs 123 kilograms.

Guided Practice

Calculate the weight of the object.

1. What is the weight of the parrot?



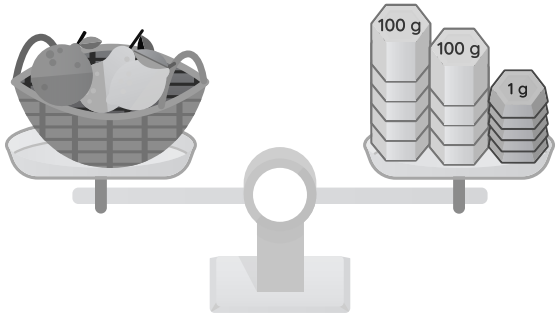
_____ + _____ = _____

The weight of the parrot is _____ grams.

Guided Practice

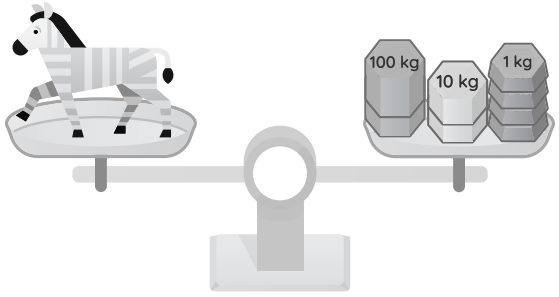
Calculate the weight of each object.

2. What is the weight of the fruit basket?



The weight of the fruit basket is _____.

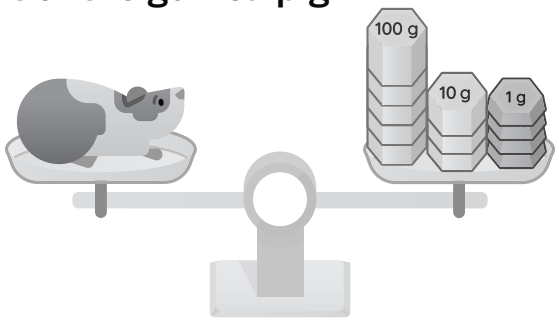
3. What is the weight of the zebra?



The weight of the zebra is _____.

Check

What is the weight of the guinea pig?



The guinea pig weighs _____.

Name _____

Estimating Liquid Volume

ML 6.09

Modeled Review

Name: Diego

Decide whether the container holds *more than 1 liter*, *less than 1 liter*, or *about 1 liter* of liquid.

1. bottle of juice — about 1 liter
same as a water bottle

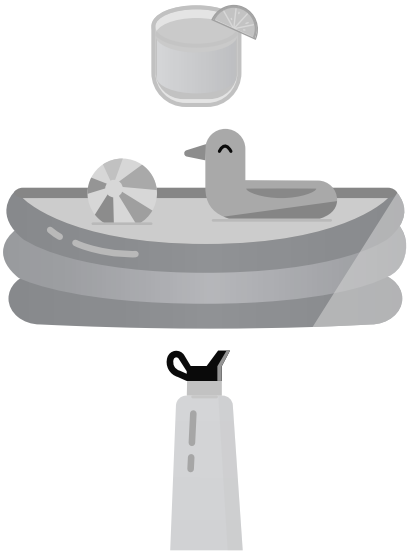
2. cup of tea — less than 1 liter
smaller than a water bottle

3. classroom sink — more than 1 liter
bigger than a water bottle

Guided Practice

1. Estimate the liquid volume by matching the picture to the correct measurement.

A water bottle is about 1 liter.



about 1 liter

less than 1 liter

more than 1 liter

Guided Practice

Decide whether the container holds *more than 1 liter*, *less than 1 liter*, or *about 1 liter* of liquid.

A water bottle is about 1 liter. 

2. coffee mug _____

3. pasta sauce container _____

4. large aquarium _____

5. tube of toothpaste _____

6. hot tub _____

7. shampoo bottle _____

8. can of paint _____

9. a small yogurt container _____

10. ketchup packet _____

Check

Decide whether the container holds *more than 1 liter*, *less than 1 liter*, or *about 1 liter* of liquid.

1. small bottle of lotion _____

2. large can of soup _____

3. lake _____

Name _____

Measuring Liquid Volume in Liters

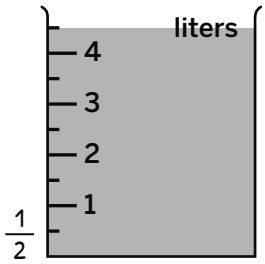
ML 6.10

Modeled Review

Name: Han

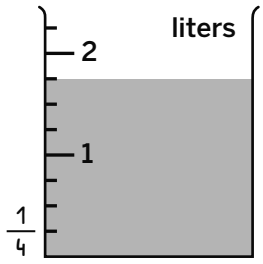
The containers are marked in liters. Determine the volume of the liquid in each container.

1.



answer: $4\frac{1}{2}$ liters

2.

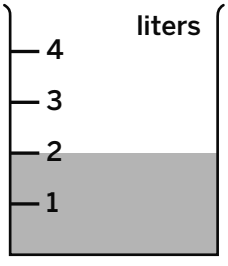


answer: $1\frac{3}{4}$ liters

Guided Practice

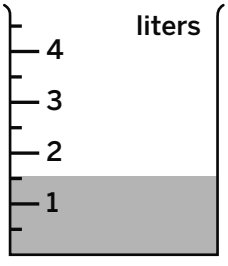
The containers are marked in liters. Determine the volume of the liquid in each container.

1.



answer: _____ liters

2.

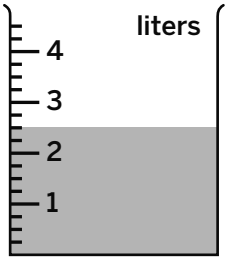


answer: _____ liters

Guided Practice

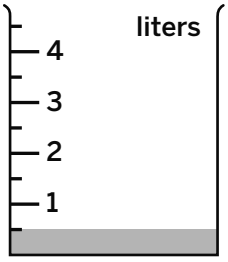
The containers are marked in liters. Determine the volume of the liquid in each container.

3.



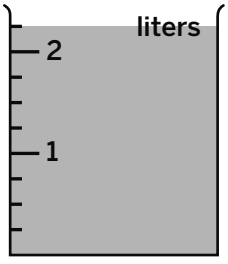
answer: _____

4.



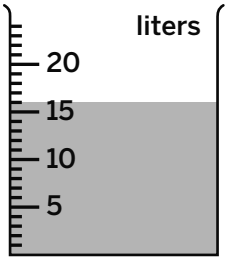
answer: _____

5.



answer: _____

6.

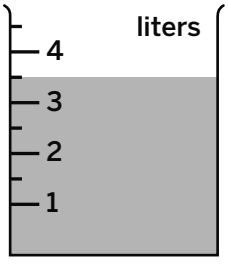


answer: _____

Check

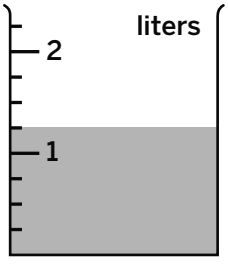
The containers are marked in liters. Determine the volume of the liquid in each container.

1.



answer: _____

2.



answer: _____

Name _____

Telling Time to the Minute

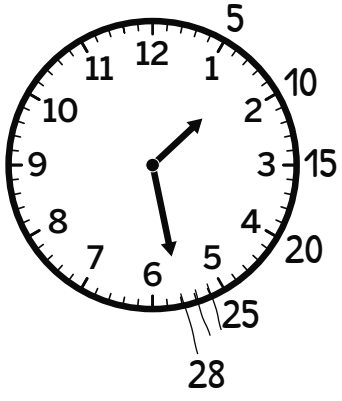
ML 6.11

Modeled Review

Name: Clare

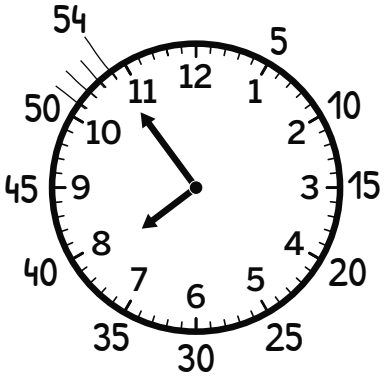
Write the time shown on the clock.

1.



1:28

2.

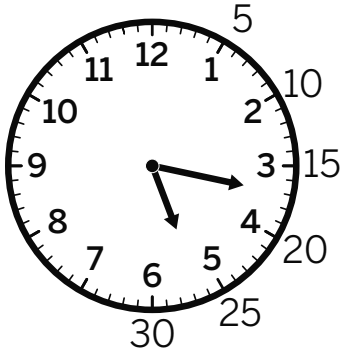


7:54

Guided Practice

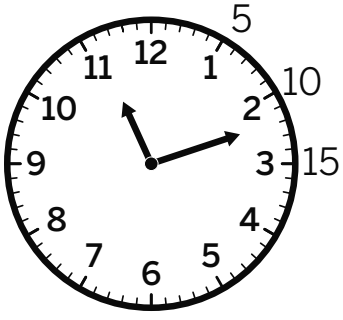
Circle the time shown on the clock.

1.



5:17 3:26

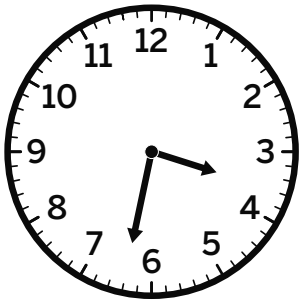
2.



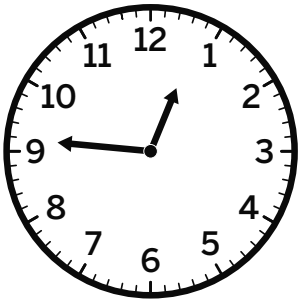
2:55 11:12

Guided Practice

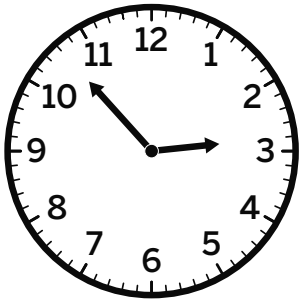
Write the time shown on the clock.

3. 

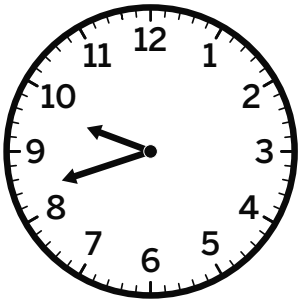
_____

4. 

_____

5. 

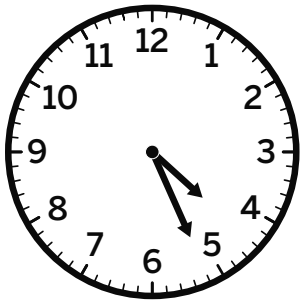
_____

6. 

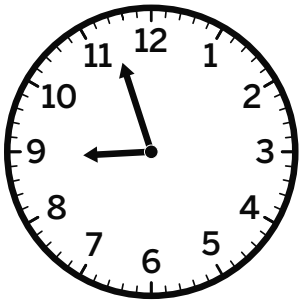
_____

Check

Write the time shown on the clock.

1. 

_____

2. 

_____

Name _____

Interpreting Problems Involving Start and End Times

ML 6.12

Modeled Review

Name: Tristan

Identify the key details in the story problem.

Clare spent 35 minutes baking pumpkin scones. She started baking at 2:16 p.m. What time did Clare finish baking the scones?

Time it started: 2:16

How long it took: 35 minutes

Time it ended: 2:51

To find the information I would: count on from 2:16

Guided Practice

Identify the key details in the story problem.

1. Diego finished baking banana bread at 11:58 a.m. It took him 53 minutes to bake it. What time did Diego start baking the bread?

Time it started: 11:05

How long it took: 53 minutes

Time it ended: _____

To find the information I would: count back from 11:58

Guided Practice

Identify the key details in the story problem.

2. Priya took 48 minutes to bake lemon blueberry scones. She began baking at 9:18 a.m. What time did Priya finish baking the scones?

Time it started: _____

How long it took: _____

Time it ended: 10:06

To find the information I would: count _____ from 9:18

3. Dylan finished making granola bars at 4:23 p.m. It took him 29 minutes to make them. What time did Dylan start making the granola bars?

Time it started: 3:54

How long it took: _____

Time it ended: _____

To find the information I would: _____

Check

Identify the key details in the story problem.

Maya spent 38 minutes baking zucchini bread. She started baking at 6:45 p.m. What time did Maya finish baking the bread?

Time it started: _____

How long it took: _____

Time it ended: 7:23

To find the information I would: _____

Name _____

Solving Elapsed Time Problems

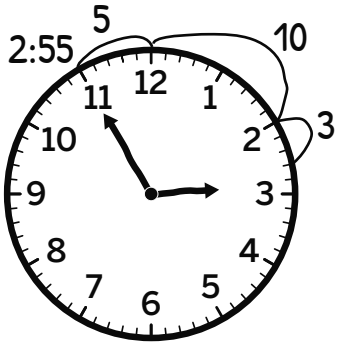
ML 6.13

Modeled Review

Name: Eva

Solve the time problem. Use the blank clock if it is helpful.

Santiago went on the Ferris wheel at 2:55 p.m. He got off the Ferris wheel at 3:13. How long was the ride?



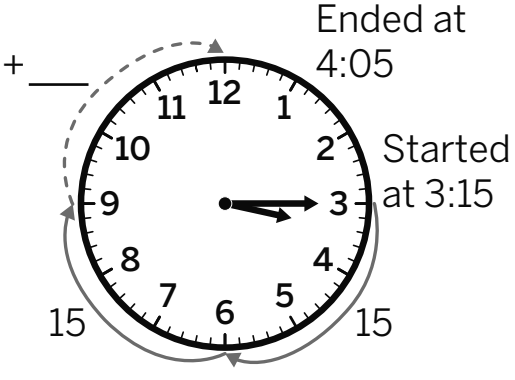
5 + 10 + 3 = 18

answer: 18 minutes

Guided Practice

Solve the time problem. Use the clock if it is helpful.

1. Jada watched a magic show that started at 3:15 p.m. and ended at 4:05 p.m. How long did the magic show last?



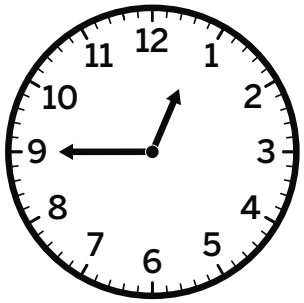
15 + 15 + ___ + ___ = _____

answer: _____ minutes

Guided Practice

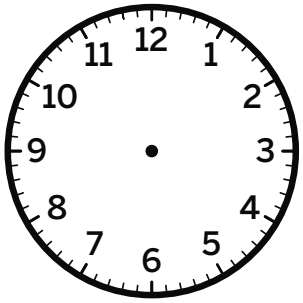
Solve the time problems. Use the clock if it is helpful.

2. Jack and his friends started eating lunch at 12:45 p.m. They finished eating at 1:21 p.m. How long were they eating lunch?



answer: _____ minutes

3. Avery started playing games at the fair at 3:37 p.m. She left at 4:22 p.m. How long was Avery playing games?

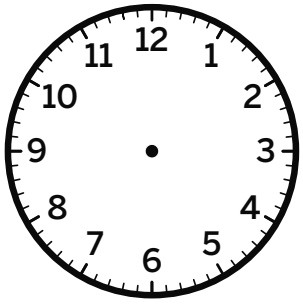


answer: _____ minutes

Check

Solve the time problem. Use the blank clock if it is helpful.

Tristan met his friends at the fair at 2:17 p.m. He left at 3:12 p.m. How long was Tristan at the fair?



answer: _____ minutes

Name _____

Solving Problems About Time

ML 6.14

Modeled Review

Name: Maya

A show that is 27 minutes long ends at 4:15 p.m. What time does the show start?

4:15 back 15 minutes = 4:00

4:00 back 10 minutes = 3:50

3:50 back 2 minutes = 3:48

15 + 10 + 2 = 27 minutes

answer: 3:48 p.m.

Guided Practice

Solve the time problem using addition and subtraction.

1. Avery's soccer practice is 52 minutes long. It ends at 6:30 p.m. What time did her practice start?

6:30 back 30 minutes = _____

30 + 20 + 2 = _____

_____ back 20 minutes = _____

_____ back 2 minutes = _____

answer: _____

Guided Practice

Solve the time problems using addition and subtraction.

2. Math class is 57 minutes long. It ends at 10:15 a.m. What time did math start?

10:15 back 15 minutes = _____ 15 + ____ + ____ = ____

answer: _____

3. Recess is 30 minutes long. It ends at 1:10 p.m. What time did recess start?

answer: _____

4. Diego's bus ride home is 24 minutes long. He gets home at 3:15 p.m. What time does his bus leave school?

answer: _____

Check

Solve using addition or subtraction.

Priya gets 45 minutes of playtime before dinner. Dinner starts at 6:15 p.m. What time does Priya's playtime start?

answer: _____

Name _____

Solving Problems Involving Liquid Volume

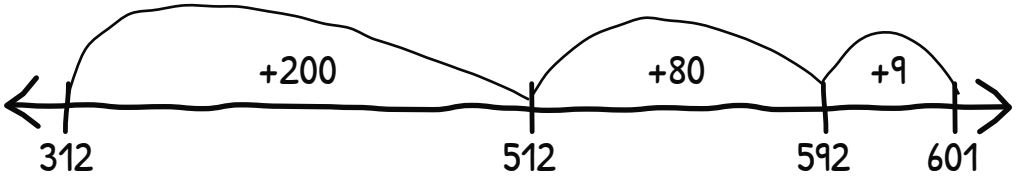
ML 6.15

Modeled Review

Name: Jada

Solve the problem and write an equation using a ? for the unknown. Show your thinking.

There are two big water tanks for washing dogs. The first tank has 312 liters of water, and the second tank has 289 liters of water. How many liters of water are in both tanks together?

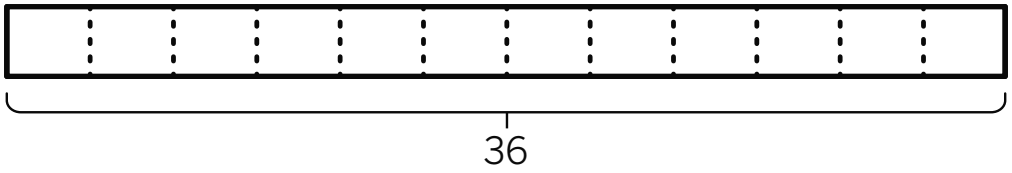


equation: 312 + 289 = ? **answer:** 601 liters

Guided Practice

Solve the problem and write an equation using a ? for the unknown. Show your thinking.

1. The pet shop owner, Priya, has 36 liters of water to split evenly between 12 water bowls for the puppies. How many liters will she put in each water bowl?



equation: _____ ÷ _____ = ? **answer:** _____ liters

Guided Practice

Solve the problem and write an equation using a ? for the unknown. Show your thinking.

2. Priya will need 76 liters of water for the medium fish tank and 158 liters of water for the large fish tank. How many liters does she need for the medium and large fish tanks?

equation: _____

answer: _____

3. The goldfish pond outside the pet shop holds 192 liters of water. The pet shop owner put in 78 liters of water already. How many more liters of water are needed to fill the rest of the pond?

equation: _____

answer: _____

Check

Solve the problem and write an equation using a ? for the unknown. Show your thinking.

The pet shop has 6 small fish tanks. Each tank holds 8 liters of water. How many liters of water do they need to fill all of the small fish tanks? Show your thinking.

equation: _____

answer: _____

Name _____

Solving Problems Involving Weight

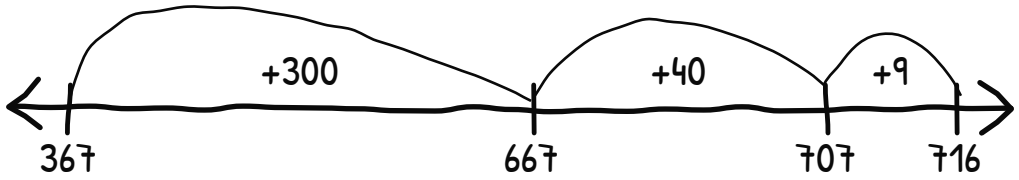
ML 6.16

Modeled Review

Name: Diego

Solve the problem and write an equation using a ? for the unknown. Show your thinking.

The chef used 349 grams of tomatoes for one batch of spaghetti sauce and 367 grams for another batch. How many grams of tomatoes did he use in total?



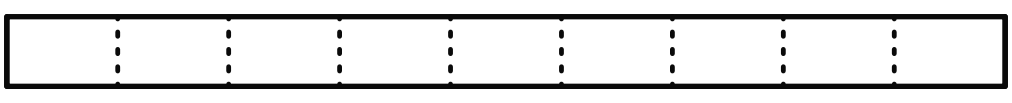
equation: 349 + 367 = ?

answer: 716 grams

Guided Practice

Solve the problem and write an equation using a ? for the unknown. Show your thinking

1. The restaurant got a delivery with 9 bags of rice. Each bag weighs 8 kilograms. How much does all of the rice weigh?



equation: _____ × _____ = ?

answer: _____ kilograms

Guided Practice

Solve the problem and write an equation using a ? for the unknown. Show your thinking.

2. The chef started with 525 grams of flour and used 359 grams of flour. How much flour does he have left?

equation: _____

answer: _____ grams

3. The chef uses 186 grams of onions and 236 grams of bell peppers for a stir-fry dish. How many grams of vegetables are used in total?

equation: _____

answer: _____

Check

Solve the problem and write an equation using a ? for the unknown. Show your thinking.

The chef has 24 kilograms of watermelon chunks. He splits the watermelon chunks evenly between 4 bowls. How many kilograms of watermelon does he put in each bowl?

equation: _____

answer: _____

Name _____

Solving Problems Involving Measurement

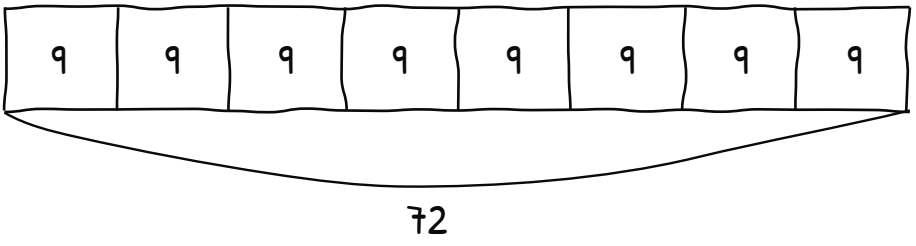
ML 6.17

Modeled Review

Name: Han

Represent the situation and solve the problem using any strategy.

A farmer had a truck full of wood that weighed 72 kilograms. She split the wood into 8 piles so she could carry it more easily. How much did each pile of wood weigh?



answer: 9 kilograms

Guided Practice

Represent the situation and solve the problem using any strategy.

1. A farmer started the day with 976 grams of grain. After feeding all of his chickens, he had 188 grams of grain left. How much grain did he give his chickens?

answer: _____ grams

Guided Practice

Represent the situation and solve the problem using any strategy.

2. A farmer had 7 containers of fertilizer for his plants. Each container held 4 liters of fertilizer. How much fertilizer did he have for his plants?

answer: _____

3. A farmer started feeding her animals at 6:45 a.m. She spent 58 minutes feeding them. What time did she finish?

answer: _____

Check

Represent the situation and solve the problem using any strategy.

A farmer started picking apples at 8:35 a.m. and finished at 9:14 a.m. How long did she spend picking apples?

answer: _____

Unit 7

Mini-Lessons

Name _____

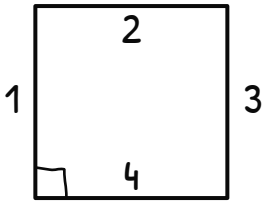
Describing and Identifying Shapes

ML 7.02

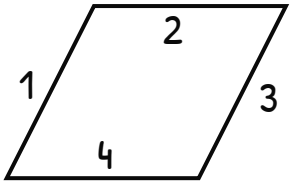
Modeled Review

Name: Jack

Select the attributes the shapes have in common.



rectangle



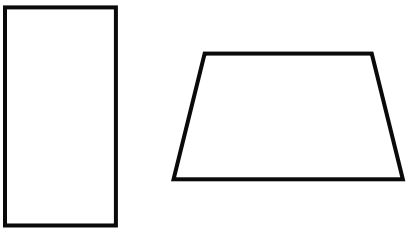
rhombus

A. equal side lengths
B. have four corners
C. are rectangles
D. three side lengths

Guided Practice

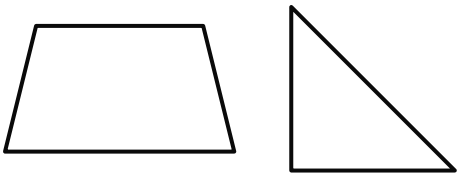
Select the attribute the shapes have in common.

1.



A. four sides
B. two pair of equal side lengths
C. at least one square corner

2.

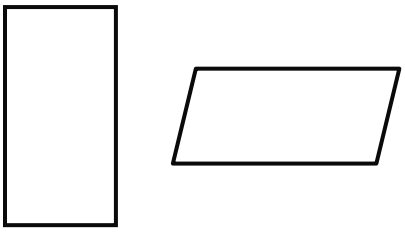


A. four sides
B. one pair of equal side lengths
C. all equal side lengths

Guided Practice

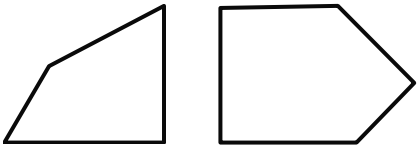
Select the two attributes the shapes have in common.

3.



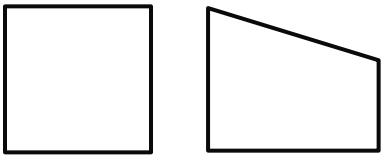
A. four sides
B. square corners
C. all equal side lengths
D. two pairs of equal sides

4.



A. two pairs of equal sides
B. less than six sides
C. at least one square corner
D. four sides

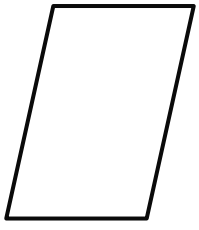
5.

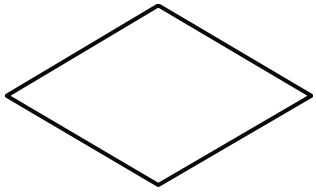


A. all equal side lengths
B. they are rectangles
C. four sides
D. at least two square corners

Check

Select the two attributes the shapes have in common.





A. no square corners
B. equal sides
C. square corners
D. four sides

Name _____

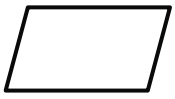
Identifying Attributes of Rectangles, Squares, and Rhombuses

ML 7.03

Modeled Review

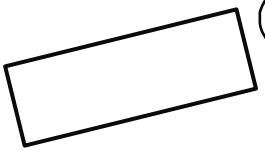
Name: Avery

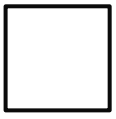
1. Select *all* the rectangles.

A. 

B. 

C. 

D. 

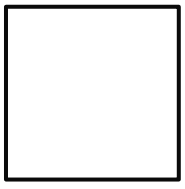
E. 

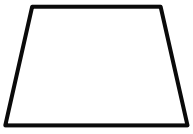
2. Describe the attributes of a rectangle.

Rectangles have 4 straight sides and 4 square corners and opposite sides are the same length.

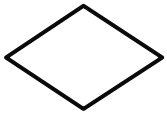
Guided Practice

1. Select the four shapes that are rhombuses.

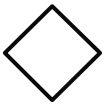
A. 

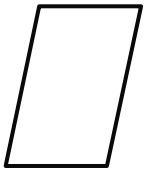
B. 

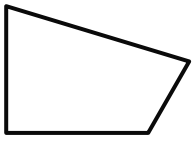
C. 

D. 

E. 

F. 

G. 

H. 

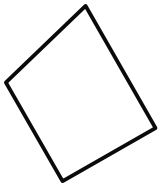
2. List the attributes of a rhombus.

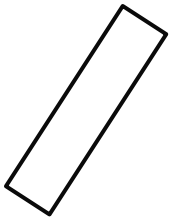
_____

_____

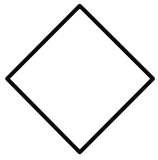
Guided Practice

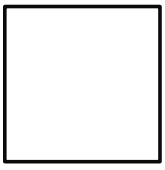
3. Select *all* the rectangles.

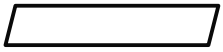
A. 

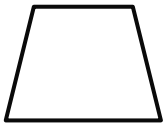
B. 

C. 

D. 

E. 

F. 

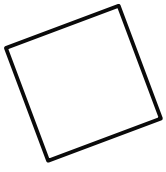
G. 

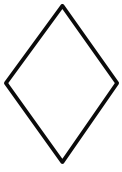
H. 

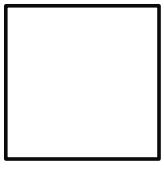
4. List the attributes of a rectangle.

Check

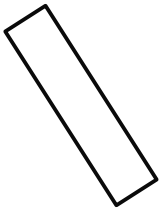
1. Select *all* the squares.

A. 

B. 

C. 

D. 

E. 

2. Describe the attributes of a square.

Name _____

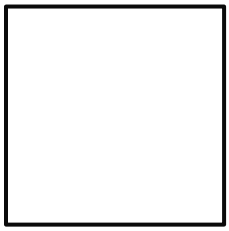
Classifying Quadrilaterals

ML 7.04

Modeled Review

Name: Clare

Select *all* the ways you could classify the shape.



4 equal side lengths, 4 right angles

~~A.~~ hexagon six sided figure

(B.) quadrilateral four sided figure

~~C.~~ triangle three sided figure

(D.) rhombus four equal sides

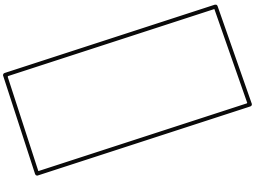
(E.) rectangle four right angles

(F.) square four equal sides

Guided Practice

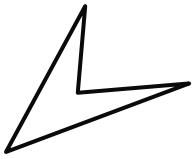
Select *all* the ways you could classify each shape.

1.



- **A.** square
- **B.** rectangle
- **C.** quadrilateral
- **D.** hexagon
- **E.** rhombus

2.

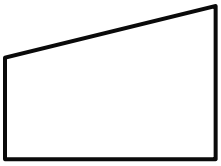


- **A.** square
- **B.** rectangle
- **C.** quadrilateral
- **D.** hexagon
- **E.** rhombus

Guided Practice

Select *all* the ways you could classify each shape.

3.



A. hexagon

B. quadrilateral

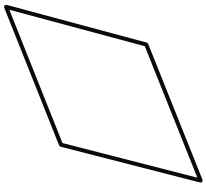
C. triangle

D. rhombus

E. rectangle

F. square

4.



A. hexagon

B. quadrilateral

C. triangle

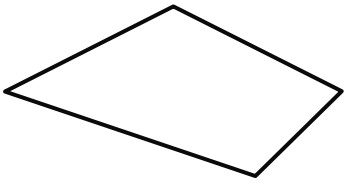
D. rhombus

E. rectangle

F. square

Check

Select *all* the ways you could classify the shape.



A. hexagon

B. quadrilateral

C. triangle

D. rhombus

E. rectangle

F. square

Name _____

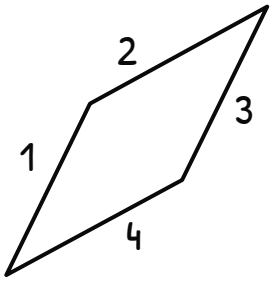
Comparing and Classifying Quadrilaterals

ML 7.05

Modeled Review

Name: Diego

Circle *all* the ways you could classify the shape.



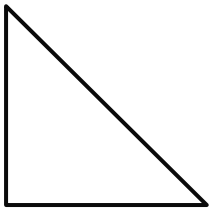
4 straight and equal sides

A. hexagon
B. quadrilateral
C. triangle
D. rhombus
E. rectangle
F. square

Guided Practice

Circle *all* the ways you could classify each shape.

1.



A. square
B. rectangle
C. quadrilateral
D. hexagon
E. rhombus
F. triangle

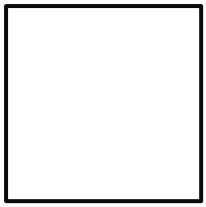
2.

A. hexagon
B. quadrilateral
C. triangle
D. rhombus
E. rectangle
F. square

Guided Practice

Circle *all* the ways you could classify each shape.

3.



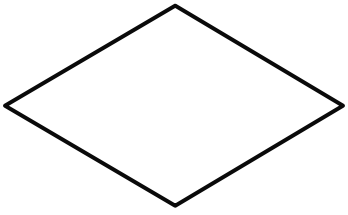
- **A.** hexagon
- **B.** quadrilateral
- **C.** triangle
- **D.** rhombus
- **E.** rectangle
- **F.** square

4.

- **A.** square
- **B.** rectangle
- **C.** hexagon
- **D.** rhombus
- **E.** quadrilateral
- **F.** triangle

Check

Circle *all* the ways you could classify the shape.



- **A.** hexagon
- **B.** rectangle
- **C.** quadrilateral
- **D.** rhombus
- **E.** square
- **F.** triangle

Name _____

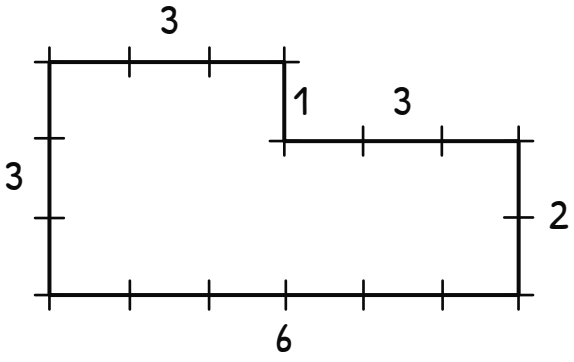
Determining Perimeter

ML 7.06

Modeled Review

Name: Priya

Determine the perimeter of the shape. The distance between two tick marks is one unit. Show your thinking.



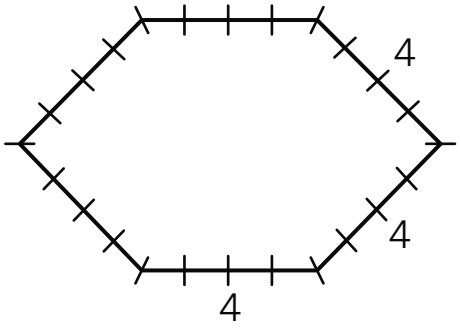
3 + 3 + 1 + 3 = 10
2 + 6 = 8
10 + 8 = 18

perimeter: 18 units

Guided Practice

Determine the perimeter of the shape. The distance between two tick marks is one unit. Show your thinking.

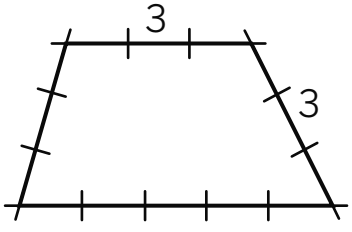
1.



4 + 4 + 4 + ___ + ___ + ___ = ___

perimeter: ___ units

2.



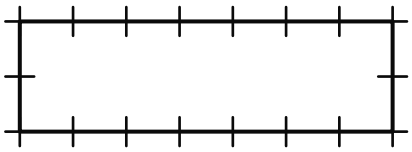
3 + 3 + ___ + ___ = ___

perimeter: ___ units

Guided Practice

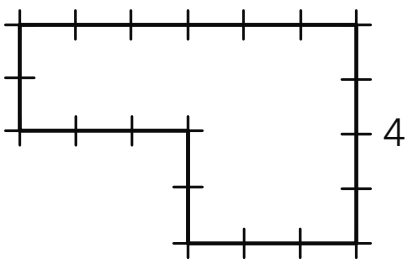
Determine the perimeter of the shape. The distance between two tick marks is one unit. Show your thinking.

3.



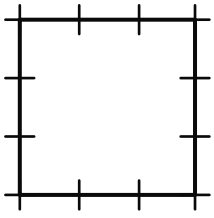
perimeter: _____

4.



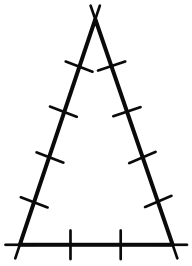
perimeter: _____

5.



perimeter: _____

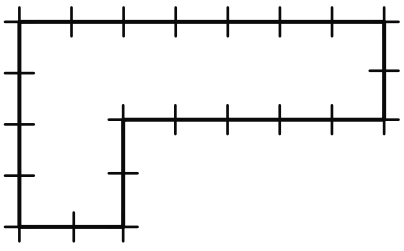
6.



perimeter: _____

Check

Determine the perimeter of the shape. The distance between two tick marks is one unit. Show your thinking.



perimeter: _____

Name _____

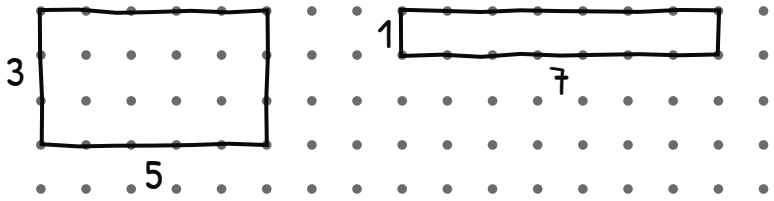
Drawing Shapes With the Same Perimeter

ML 7.07

Modeled Review

Name: Clare

Draw two different shapes that have a perimeter of 16 units.



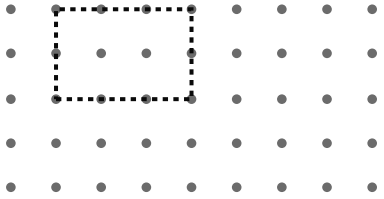
5 + 3 + 5 + 3 = 16

7 + 1 + 7 + 1 = 16

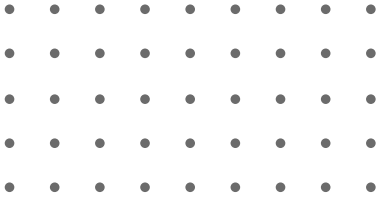
Guided Practice

Draw a shape with the given perimeter.

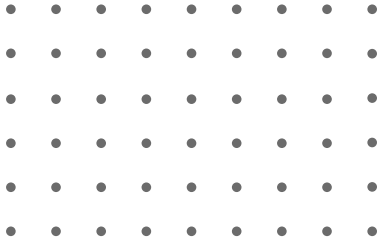
1. 10 units



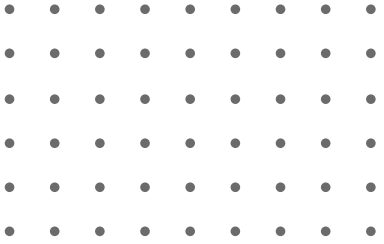
2. 8 units



3. 12 units



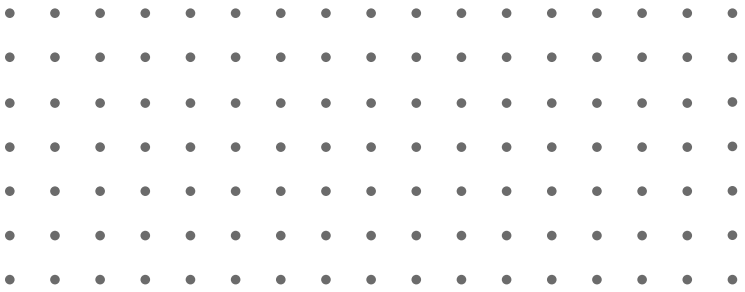
4. 20 units



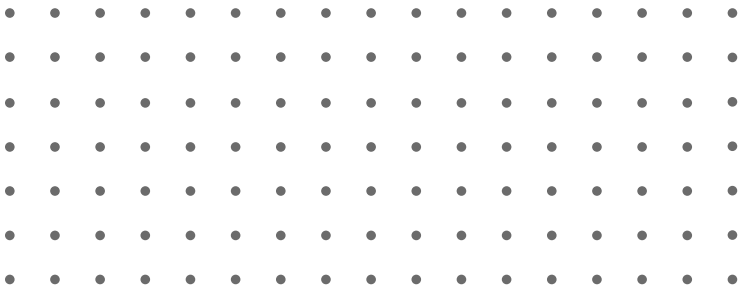
Guided Practice

Draw two different shapes with the given perimeter.

5. 14 units

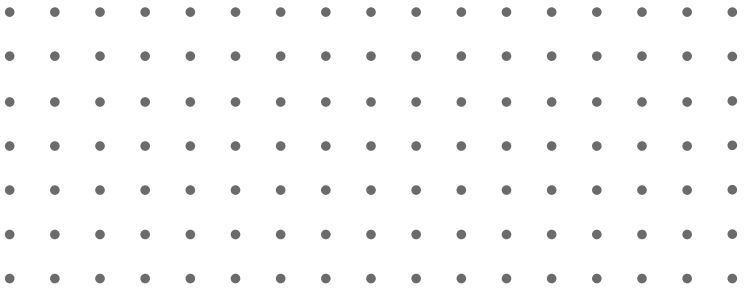


6. 22 units



Check

Draw two different shapes that have a perimeter of 18 units.



Name _____

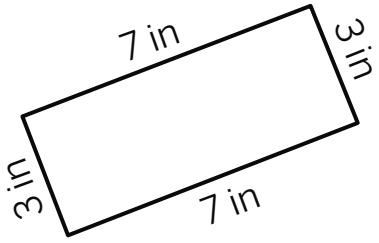
Calculating Perimeters of Shapes

ML 7.08

Modeled Review

Name: Dylan

Find the perimeter of the shape.



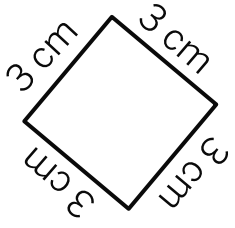
2 × 7 = 14
2 × 3 = 6
14 + 6 = 20

perimeter: 20 inches

Guided Practice

Find the perimeter of each shape.

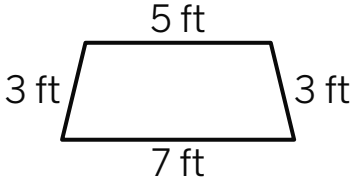
1.



3 + 3 + 3 + 3 = 4 × ____ = ____

perimeter: _____

2.



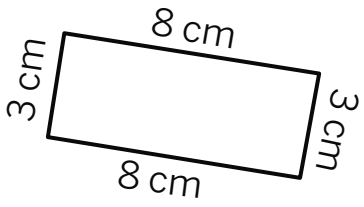
2 × ____ + ____ + ____ = ____

perimeter: _____

Guided Practice

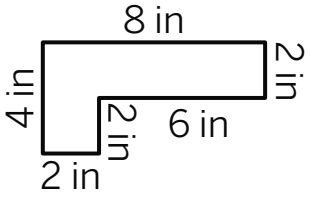
Find the perimeter of each shape.

3.



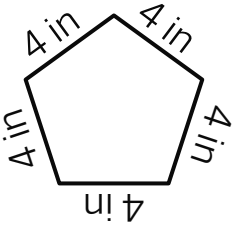
perimeter: _____

4.



perimeter: _____

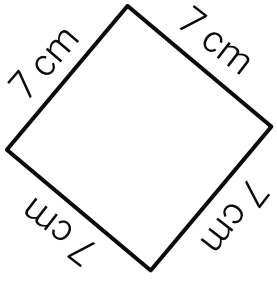
5.



perimeter: _____

Check

Find the perimeter of the shape.



perimeter: _____

Name _____

Solving Problems Involving Perimeter

ML 7.09

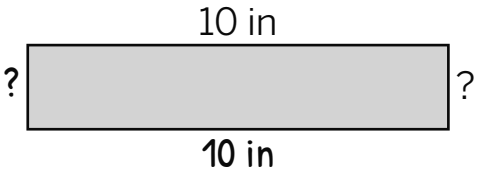
Modeled Review

Name: Tristan

Calculate the length of the unknown side. Show your thinking.

This rectangle has a perimeter of 24 inches. One side has a length of 10 inches.

10 + 10 = 20
24 – 20 = 4
4 ÷ 2 = 2

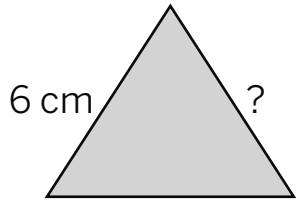


answer: 2 inches

Guided Practice

Calculate the length of the unknown side. Show your thinking.

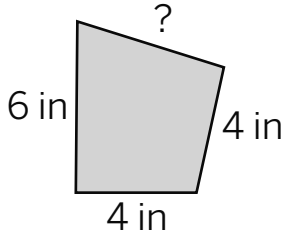
1. This triangle has 3 equal sides and a perimeter of 18 centimeters.



18 ÷ ___ = ___

answer: ___ centimeters

2. The quadrilateral has a perimeter of 19 inches.



6 + ___ + ___ = ___

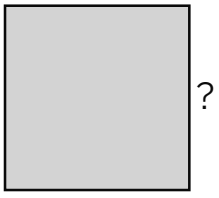
19 – ___ = ___

answer: _____

Guided Practice

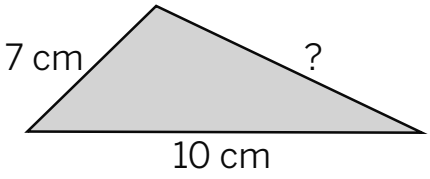
Calculate the length of the unknown side. Show your thinking.

3. This square has 4 equal sides and a perimeter of 24 inches.



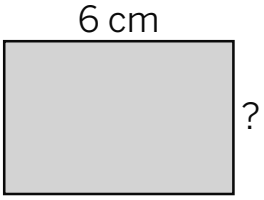
answer: _____

4. This triangle has a perimeter of 26 centimeters.



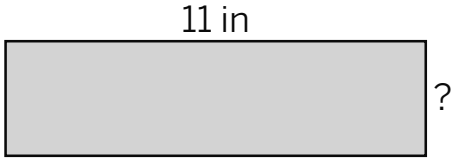
answer: _____

5. This rectangle has a perimeter of 20 centimeters.



answer: _____

6. This rectangle has a perimeter of 28 inches.

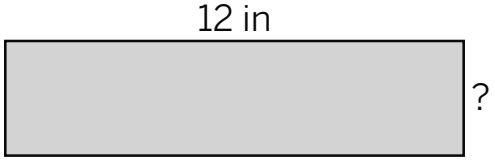


answer: _____

Check

Calculate the length of the unknown side. Show your thinking.

This rectangle has a perimeter of 30 inches. One side has a length of 12 inches.



answer: _____

Name _____

Solving Problems Involving Perimeter and Area

ML 7.10

Modeled Review

Name: Eva

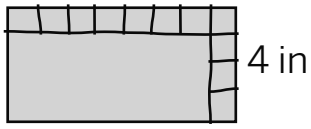
Calculate the area and perimeter of the rectangle.

Perimeter

8 + 8 = 16

4 + 4 = 8

16 + 8 = 24



Area

4 × 8 = 32

perimeter: 24 inches **area:** 32 square inches

Guided Practice

Calculate the area and perimeter of each rectangle.

1.

Perimeter:

9 + ___ + ___ + 3 = ___

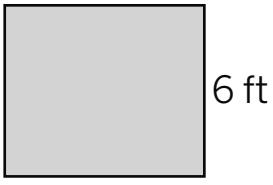
Area:

3 × 9 = ___

perimeter: ___ inches

area: ___ square inches

2.



Perimeter:

7 + ___ + ___ + 6 = ___

Area:

6 × ___ = ___

perimeter: _____

area: _____

Guided Practice

Calculate the area and perimeter of each rectangle.

3.

perimeter: _____

area: _____

4.

perimeter: _____

area: _____

5.

perimeter: _____

area: _____

6.

perimeter: _____

area: _____

Check

Calculate the area and perimeter of the rectangle.

perimeter: _____

area: _____

Name _____

Exploring Rectangles With the Same Perimeter

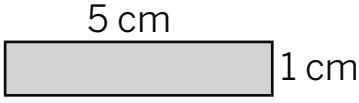
ML 7.11

Modeled Review

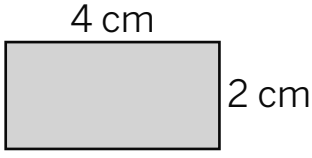
Name: Santiago

These rectangles have a perimeter of 12 centimeters. Do they have the same area? Show your thinking.

yes or (no)



1 x 5 = 5 square cm

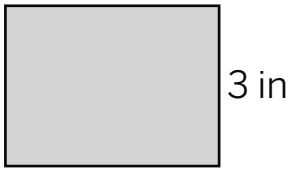


2 x 4 = 8 square cm

Guided Practice

Calculate the perimeter and area of each rectangle.

1.



4 + ___ + ___ + 3 = ___

3 × 4 = ___

perimeter: ___ inches

area: ___ square inches

2.

5 + ___ + ___ + 2 = ___

2 × ___ = ___

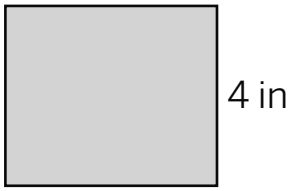
perimeter: _____

area: _____

Guided Practice

Calculate the area and perimeter of each rectangle.

3.



perimeter: _____

area: _____

4.

perimeter: _____

area: _____

5.

perimeter: _____

area: _____

6.

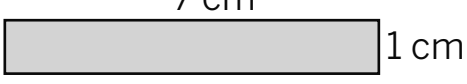
perimeter: _____

area: _____

Check

These rectangles have a perimeter of 16 centimeters. Do they have the same area? Show your thinking.

yes or no



Name _____

Exploring Rectangles With the Same Area

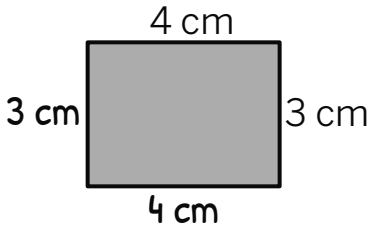
ML 7.12

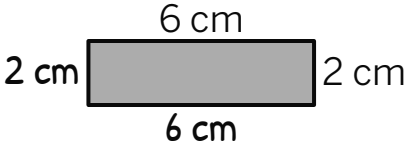
Modeled Review

Name: Han

These rectangles have an area of 12 square centimeters. Do they have the same perimeter? Show your thinking.

yes or (no)





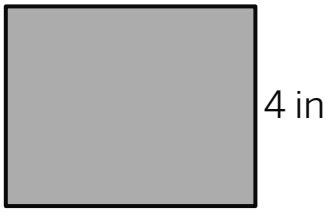
4 + 4 + 3 + 3 = 14 centimeters

6 + 6 + 2 + 2 = 16 centimeters

Guided Practice

Calculate the perimeter and area of each rectangle.

1.



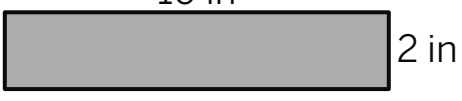
5 + ____ + 4 + ____ = ____

5 × 4 = ____

perimeter: _____

area: _____

2.



10 + ____ + 2 + ____ = ____

10 × ____ = ____

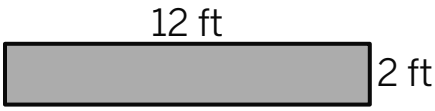
perimeter: _____

area: _____

Guided Practice

Calculate the area and perimeter of each rectangle.

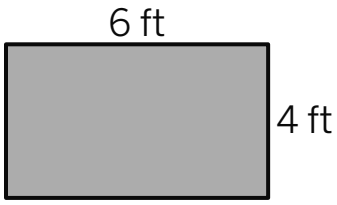
3.



perimeter: _____

area: _____

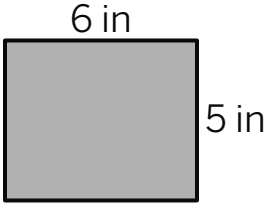
4.



perimeter: _____

area: _____

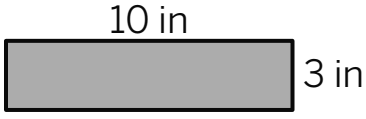
5.



perimeter: _____

area: _____

6.



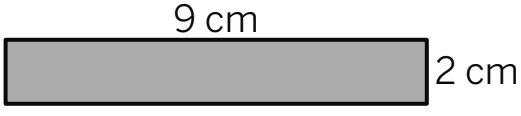
perimeter: _____

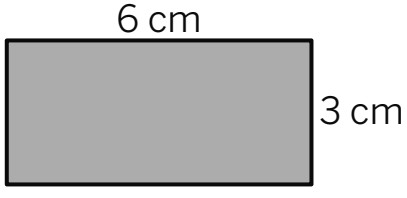
area: _____

Check

These rectangles have an area of 18 square centimeters. Do they have the same perimeter? Show your thinking.

yes or no





Name _____

Applying Area and Perimeter to Solve Real-World Problems

ML 7.13

Modeled Review

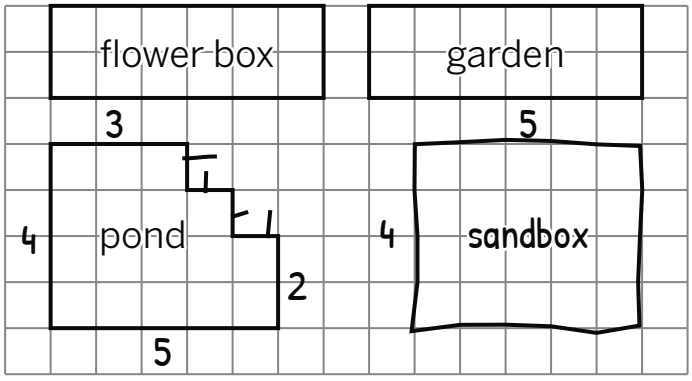
Name: Jada

Each square on the grid represents 1 square foot.

Add a sandbox to the yard that has the same perimeter as the pond but a different area. Then write the perimeter and area of the sandbox.

perimeter: 18 feet

area: 20 square feet



P: 5 + 4 + 3 + 4 + 2 = 18
A: 5 + 5 + 4 + 3 = 17

P: 5 + 4 + 5 + 4 = 18
A: 4 × 5 = 20

Guided Practice

Each square on the grid represents 1 square foot. Calculate the area and perimeter of the objects in the kitchen.

1. sink

perimeter: _____

area: _____

2. table

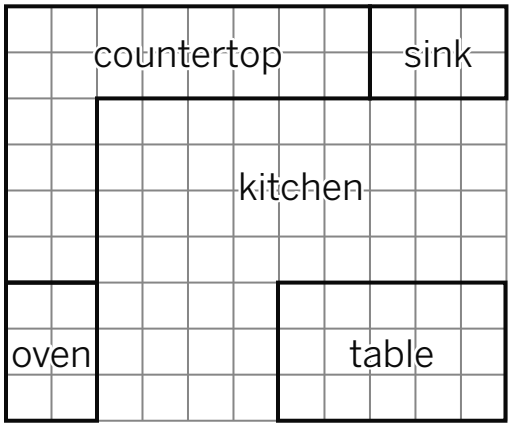
perimeter: _____

area: _____

3. countertop

perimeter: _____

area: _____



Guided Practice

Each square on the grid represents 1 square foot. For Problems 4–5, calculate the area and perimeter of the objects in the bathroom.

4. shower

perimeter: _____

area: _____

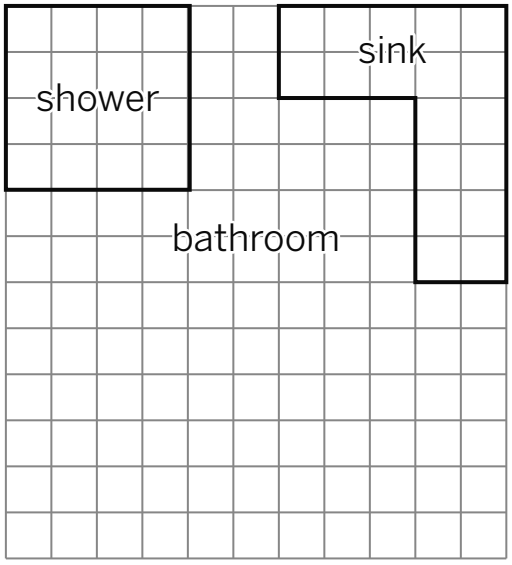
5. sink

perimeter: _____

area: _____

6. Add a bathtub that has a perimeter of 18 feet. Then write the area of the bathtub.

area: _____



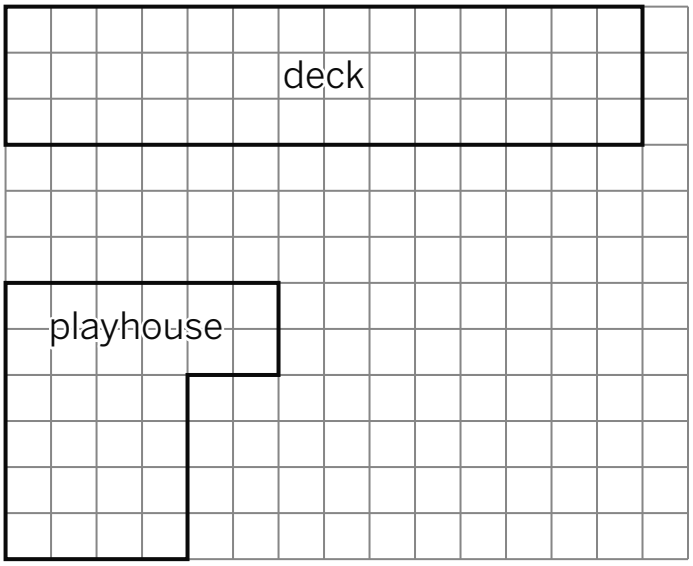
Check

Each square on the grid represents 1 square foot.

Add a chicken coop to the yard that has the same perimeter as the playhouse but a different area. Then write the perimeter and area of the chicken coop.

perimeter: _____

area: _____



Prerequisite Skills and Concepts

Mini-Lessons

Name _____

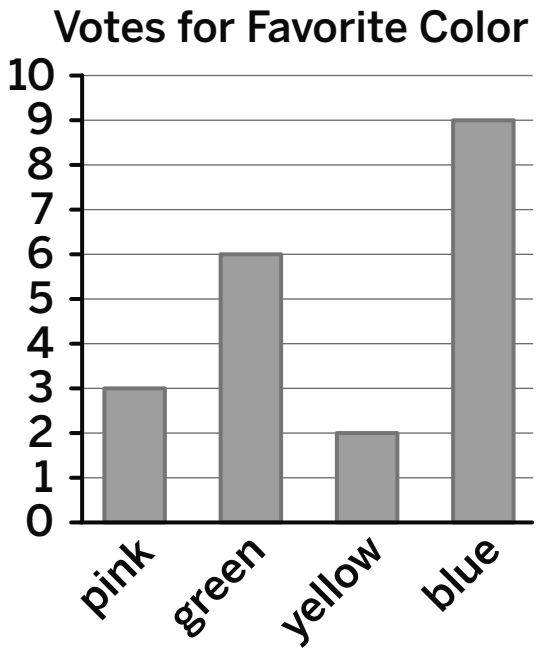
Interpreting Bar Graphs

ML 1.09

Modeled Review

Name: Clare

Students voted for their favorite color. Use the data displayed on the bar graph to answer Problems 1 and 2.



1. How many students voted for green or yellow?

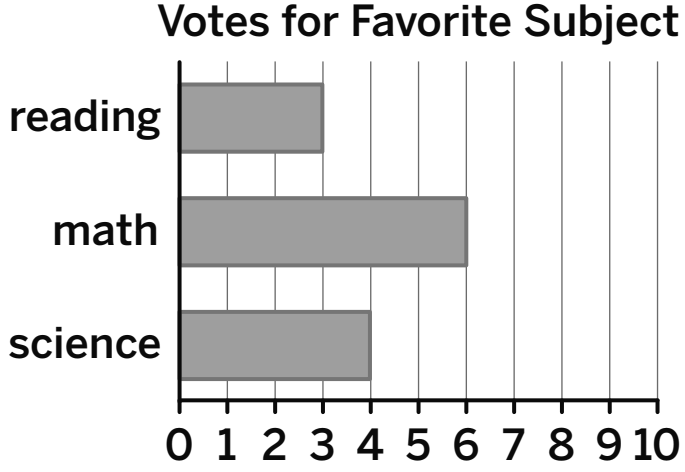
8 students

2. How many *more* students voted for blue than pink?

6 students

Guided Practice

The bar graph shows students' favorite subject in school.



1. How many students chose each subject?

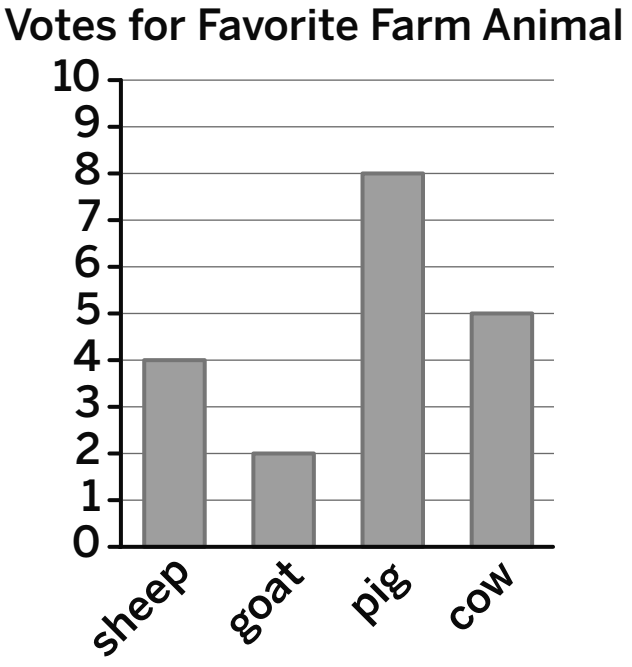
reading: 3 students

math: _____

science: _____

Guided Practice

The bar graph shows some students' favorite farm animal. Use the bar graph for Problems 2–4.



2. How many students voted for sheep or pig?

_____

3. How many *more* students voted for cow than goat?

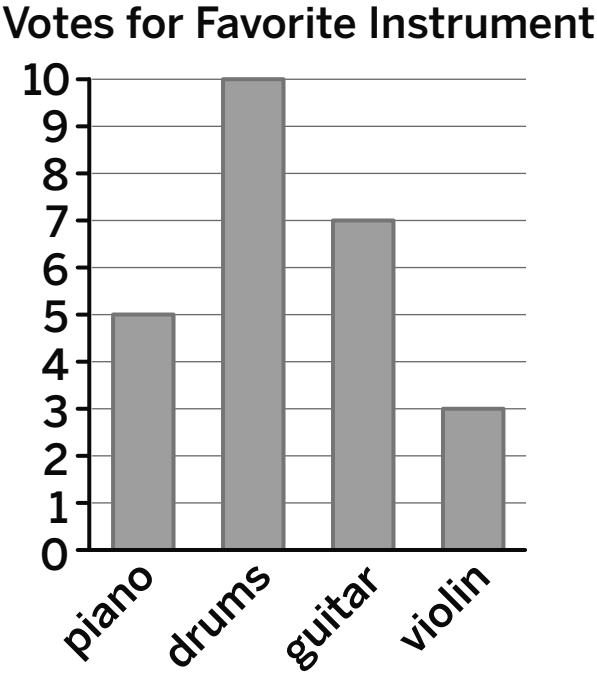
_____

4. How many students voted in total?

_____

Check

The bar graph shows some students' favorite instrument. Use the bar graph for Problems 1 and 2.



1. How many students voted for guitar or piano?

_____

2. How many *more* students voted for drums than violin?

_____

Name _____

Matching Tape Diagrams, Equations, and Story Problems About Data

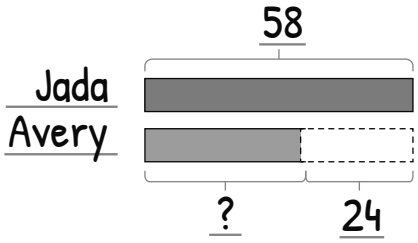
ML 1.15

Modeled Review

Name: Shawn

Jada has 58 stamps. Avery has 24 *fewer* stamps than Jada.

1. Use the story problem to fill in the diagram.



2. Write two equations that match the story problem and tape diagram. Use a ? symbol to represent the unknown number of stamps.

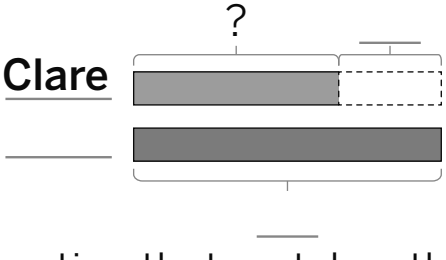
equation 1: ? + 24 = 58

equation 2: 58 – 24 = ?

Guided Practice

Eva has 45 stickers. Clare has 15 *fewer* stickers than Eva.

1. Use the story problem to fill in the diagram.



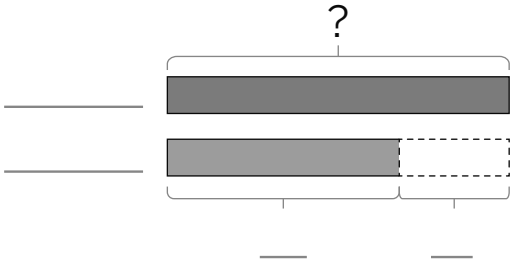
2. Complete the equation that matches the story problem and tape diagram.

equation: ? + 15 = ____

Guided Practice

Jack has 23 toy cars. Dylan has 11 *more* toy cars than Jack.

3. Use the story problem to fill in the diagram.



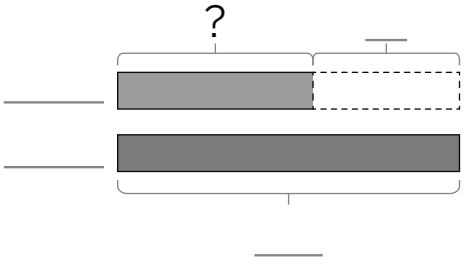
4. Write an equation that matches the story problem and tape diagram. Use a ? symbol to represent the unknown number of toy cars.

equation: _____

Check

Kai has 38 marbles. Han has 17 *fewer* marbles than Kai.

1. Use the story problem to fill in the diagram.



2. Write an equation that matches the story problem and tape diagram. Use a ? symbol to represent the unknown number of marbles.

equation: _____

Name _____

Writing Equations for Two-Step Story Problems

ML 2.22

Modeled Review

Name: Kai

Solve the problem. Write an equation to represent the story problem.

The flower shop has 20 roses and 20 sunflowers. The flower shop sold 12 flowers. How many flowers are left in the shop?

Step 1: 20 + 20 = 40 flowers
Step 2: 40 – 12 = 28 flowers

answer: 28 flowers

equation: 20 + 20 – 12 = 28

Guided Practice

Circle the equation that matches the story problem.

1. Maya collected 18 heart stickers and 22 star stickers. Her sister gave her 16 more stickers. How many stickers does Maya have now?

18 + 22 + 16 = 56 18 + 22 – 16 = 24

2. There were 45 vegetables for sale at the market. 15 vegetables were sold in the morning and 10 in the afternoon. How many vegetables were left at the market?

45 + 15 – 10 = 50 45 – 15 – 10 = 20

Guided Practice

Solve the problem. Write an equation to represent the story problem.

3. There are 15 students on the red team and 15 students on the white team playing basketball. 10 students left the court. How many students are still playing basketball?

answer: _____ students **equation:** 15 + 15 – ____ = ____

4. There are 12 people reading and 15 people checking out books in the library. 5 people leave the library. How many people are still in the library?

answer: _____ people **equation:** _____

Check

Solve the problem. Write an equation to represent the story problem.

Avery has 65 dollars. She spent 25 dollars on books and 25 dollars on baseball cards. How much money does Avery have left?

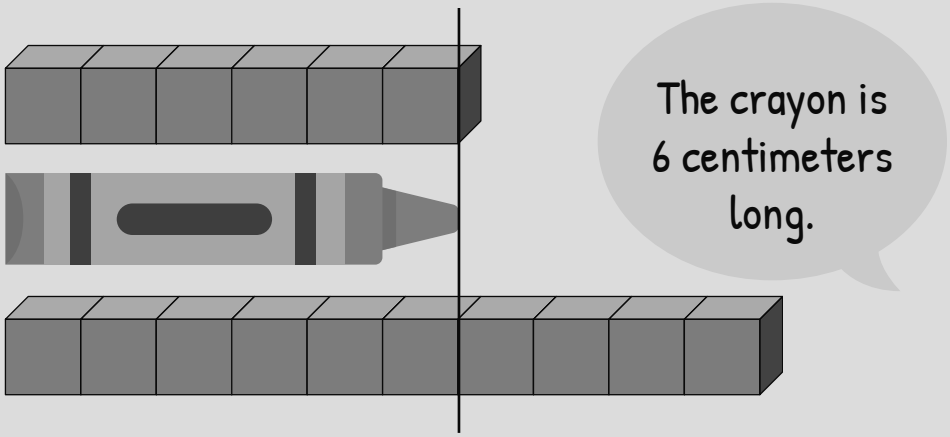
answer: _____ dollars **equation:** _____

Name _____

Measuring the Lengths of Objects in Centimeters

ML 3.02

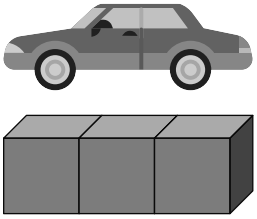
Modeled Review



Guided Practice

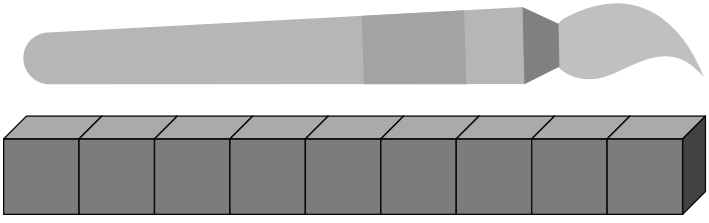
Measure the length of each object in centimeters. Record each length in the sentence.

1.



The toy car is ____ centimeters long.

2.



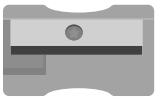
The paintbrush is ____ centimeters long.

Guided Practice

Use cubes or rods to measure the length of each object in centimeters. Record the length in the sentence.

3. 

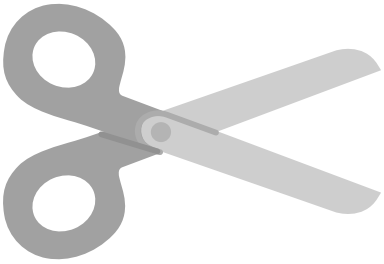
The highlighter is ____ centimeters long.

4. 

The pencil sharpener is ____ centimeters long.

5. 

The glue stick is ____ centimeters long.

6. 

The scissors are ____ centimeters long.

Check

Use cubes or rods to measure the length of the object in centimeters. Record the length in the sentence.

The pencil is ____ centimeters long.

Name _____

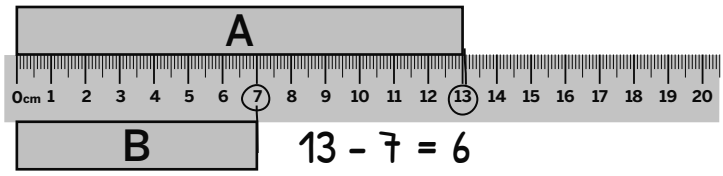
Comparing the Lengths of Objects in Centimeters

ML 3.03

Modeled Review

Name: Diego

Use the centimeter ruler to measure the length of each rectangle.



13 - 7 = 6

1. Rectangle A is 13 centimeters long.

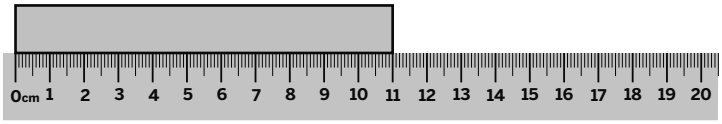
2. Rectangle B is 7 centimeters long.

3. How many centimeters *longer* is Rectangle A than Rectangle B?

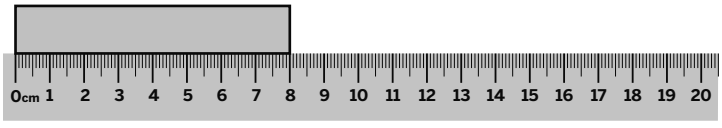
   6 centimeters

Guided Practice

Use the centimeter ruler to measure the length of each rectangle.

1. 

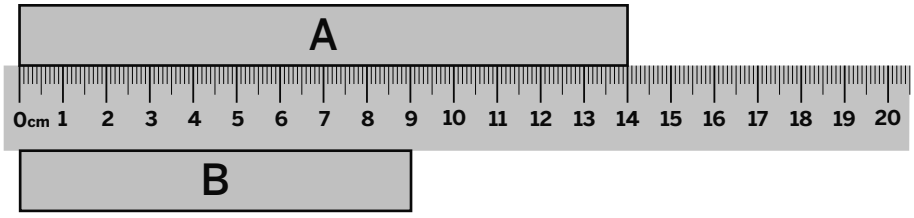
   The rectangle is _____ centimeters long.

2. 

   The rectangle is _____ long.

Guided Practice

Use the centimeter ruler to measure the length of each rectangle.



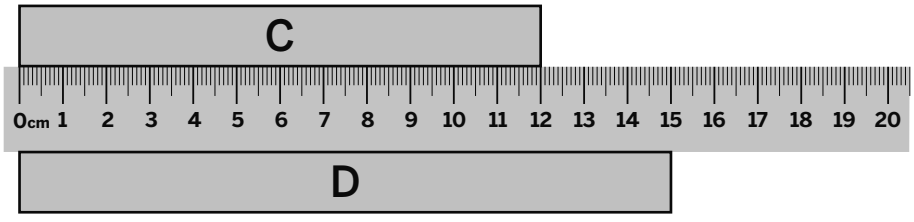
3. Rectangle A is _____ long.

4. Rectangle B is _____ long.

5. How many centimeters *longer* is Rectangle A than Rectangle B? _____

Check

Use the centimeter ruler to measure the length of each rectangle.



1. Rectangle C is _____ long.

2. Rectangle D is _____ long.

3. How many centimeters *longer* is Rectangle D than Rectangle C? _____

Name _____

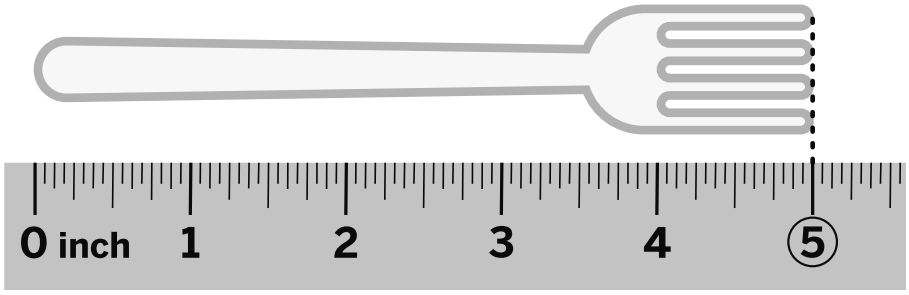
Measuring Objects in Inches

ML 3.07

Modeled Review

Name: Maya

Record the length of the fork in inches.

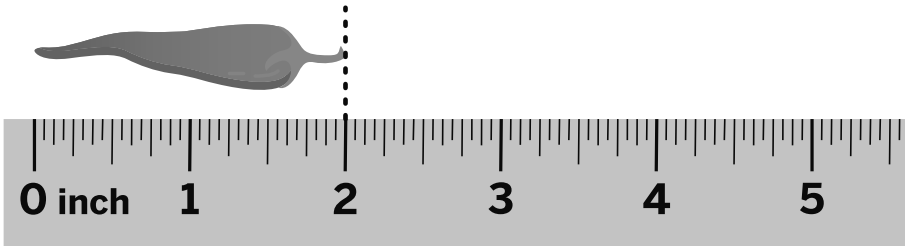


The fork is 5 inches long.

Guided Practice

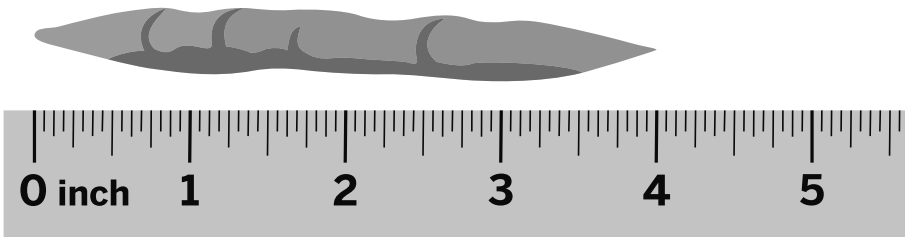
Record the length of each object in inches.

1.



The pepper is _____ inches long.

2.

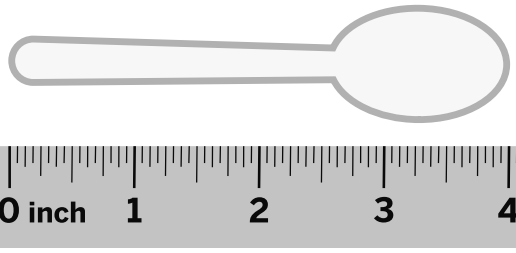


The green bean is _____ long.

Guided Practice

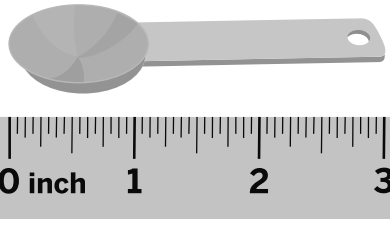
Record the length of each object in inches.

3.



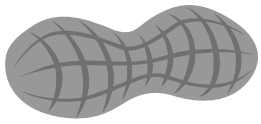
The spoon is _____ long.

4.



The teaspoon is _____ long.

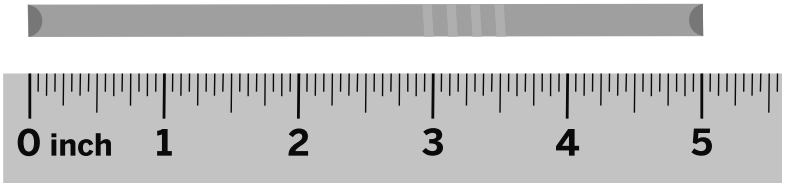
5.



The peanut is _____ long.

Check

Record the length of the straw in inches.



The straw is _____ long.

Name _____

Creating Line Plots to Represent Data

ML 3.14

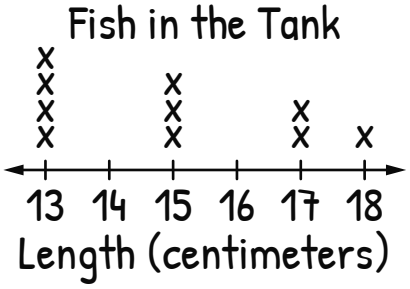
Modeled Review

Name: Dylan

Priya collected data about the lengths of the fish in the tank.

- **2 fish are 17 centimeters long.**
- **3 fish are 15 centimeters long.**
- **1 fish is 18 centimeters long.**
- **4 fish are 13 centimeters long.**

Create a line plot to represent the lengths of the fish.



I looked at the data to choose the starting and ending numbers of my line plot.

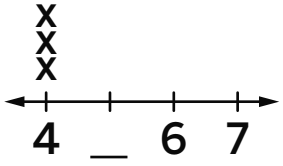
Guided Practice

Han collected data about the lengths of the fish in the tank.

- **3 fish are 4 centimeters long.**
- **4 fish are 6 centimeters long.**
- **2 fish are 7 centimeters long.**

1. Create a line plot to represent the lengths of the fish.

Fish in the Tank



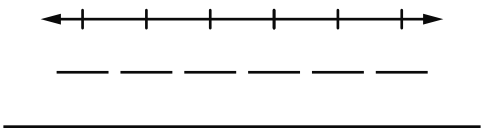
Length (centimeters)

Guided Practice

Tristan collected data about the lengths of the fish in the tank.

- **2 fish are 22 centimeters long.**
- **4 fish are 20 centimeters long.**
- **5 fish are 23 centimeters long.**
- **5 fish are 18 centimeters long.**

2. Create a line plot to represent the lengths of the fish.

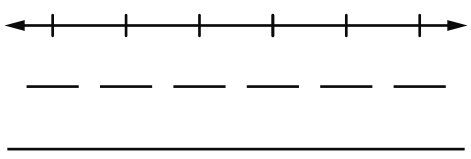


Check

Jada collected data about the lengths of the fish in the tank.

- **3 fish are 19 centimeters long.**
- **2 fish are 16 centimeters long.**
- **1 fish is 21 centimeters long.**
- **4 fish are 17 centimeters long.**

Create a line plot to represent the lengths of the fish.



Name _____

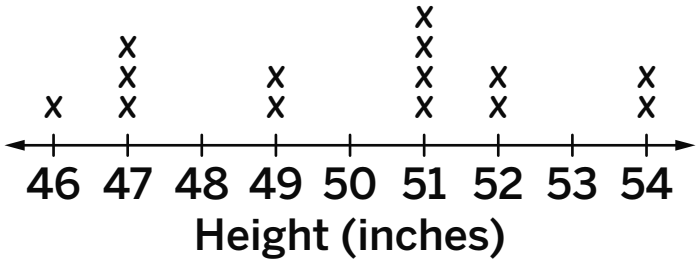
Answering Questions About Data Represented in Line Plots

ML 3.15

Modeled Review

Name: Shawn

Clare collected information about the height of students in the classroom. The line plot shows the data about the students.



1. How many students are represented in the line plot?

14 students

2. What is the height of the tallest student?

54 inches

Guided Practice

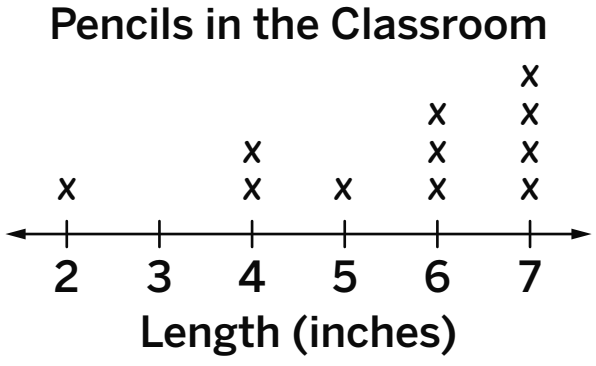
Jack collected information about the length of pencils in the classroom. The line plot shows the data about the pencils.

1. How many pencils measure 7 inches?

_____

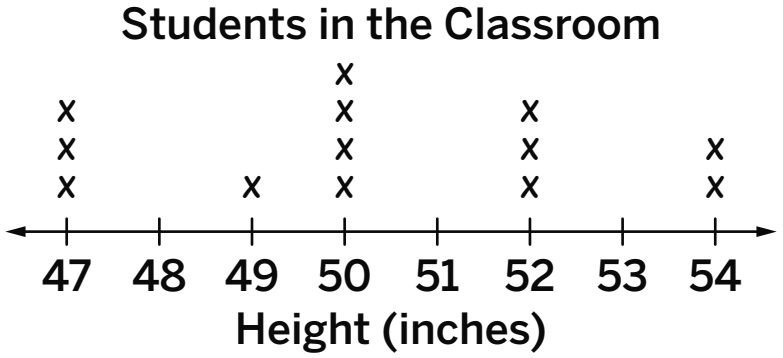
2. How many pencils measure 4 inches?

_____



Guided Practice

Eva collected information about the height of students in the classroom. The line plot shows the data about the students.



3. How many students measure 52 inches?

_____

4. How many students are represented in the line plot?

_____

5. How many students measure 49 inches or less?

_____

Check

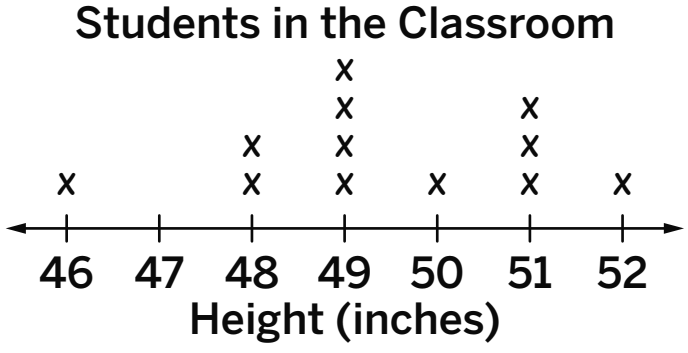
Kai collected information about the height of students in the classroom. The line plot shows the data about the students.

1. How many students are represented in the line plot?

_____

2. How many students measure 48 inches?

_____



Name _____

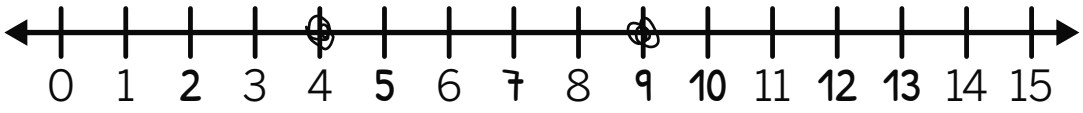
Locating Points on a Number Line

ML 4.02

Modeled Review

Name: Jack

Fill in the missing numbers on the number line. Locate the numbers 4 and 9 and mark them with a point.

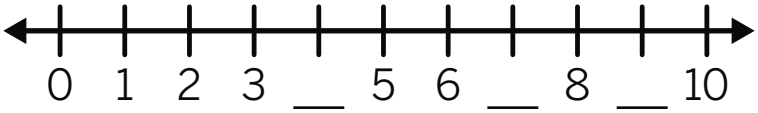


Guided Practice

For Problems 1 and 2, use the number banks to complete the number lines.

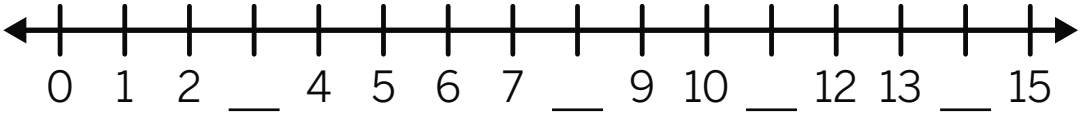
1.

9	4	7

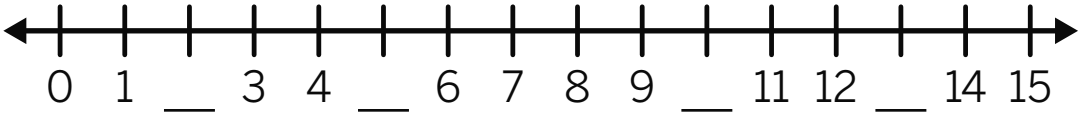


2.

11	14	3	8

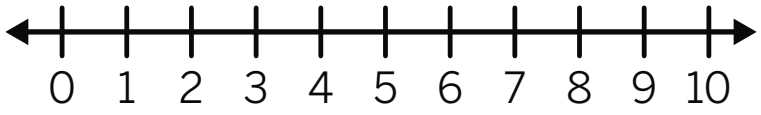


3. Fill in the missing numbers on the number line.

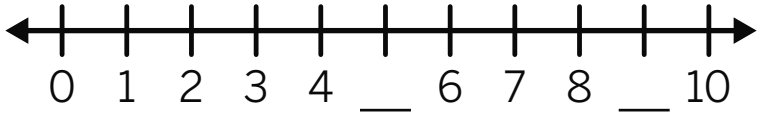


Guided Practice

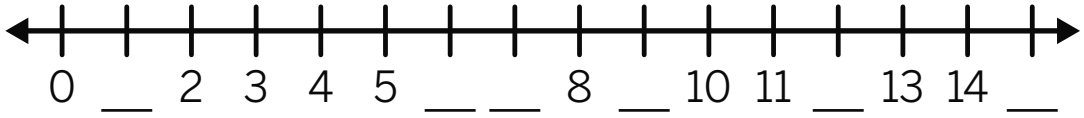
4. Locate the numbers 3 and 8 and mark them with a point.



5. Fill in the missing numbers on the number line. Locate the numbers 5 and 9 and mark them with a point.

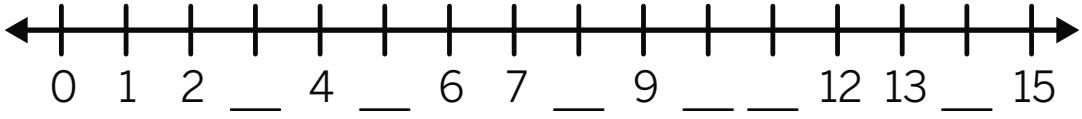


6. Fill in the missing numbers on the number line. Locate the numbers 4 and 12 and mark them with a point.



Check

Fill in the missing numbers on the number line. Locate the numbers 7 and 11 and mark them with a point.



Name _____

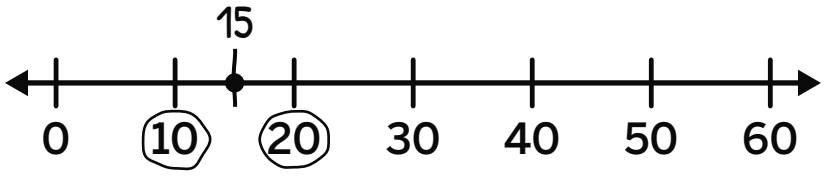
Estimating Locations on a Number Line

ML 4.05

Modeled Review

Name: Priya

Write an estimate for where the point is located on the number line.

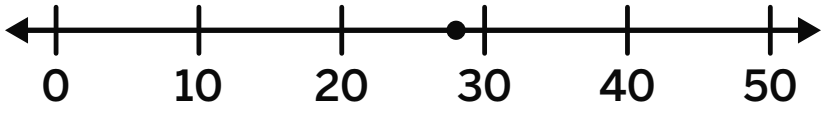


This number could be 15.

Guided Practice

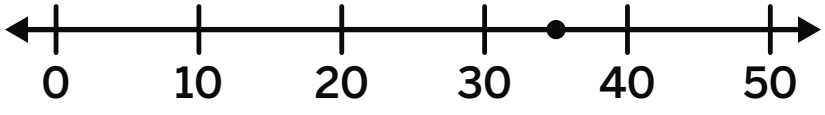
Circle the *best* estimate for the point.

1.



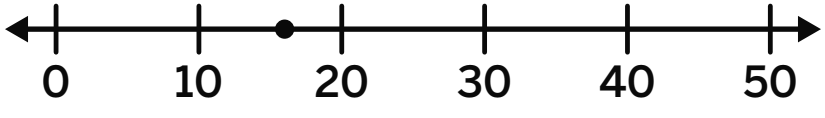
A. 12 **B.** 28 **C.** 32 **D.** 37

2.



A. 22 **B.** 40 **C.** 35 **D.** 45

3.

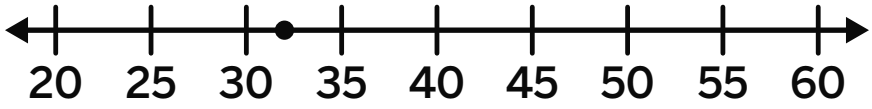


A. 12 **B.** 21 **C.** 29 **D.** 16

Guided Practice

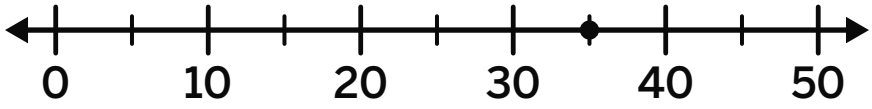
Write an estimate for where the point is located on the number line.

4.



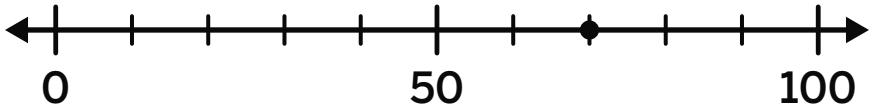
This number could be _____.

5.



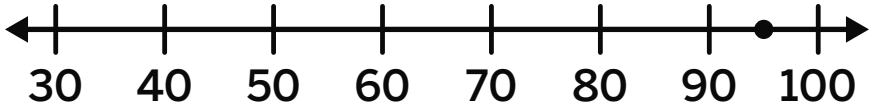
This number could be _____.

6.



This number could be _____.

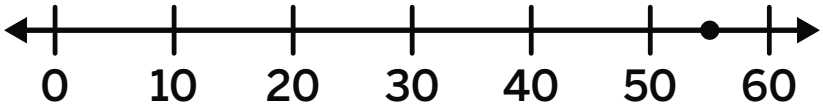
7.



This number could be _____.

Check

Write an estimate for where the point is located on the number line.



This number could be _____.

Name _____

Representing Three-Digit Numbers in Expanded Form

ML 5.06

Modeled Review

Name: Diego

1. Represent the number 483 in expanded form.

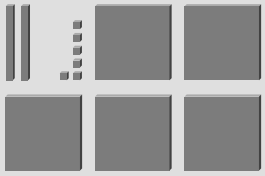
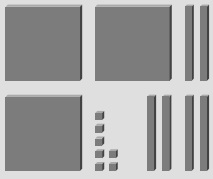
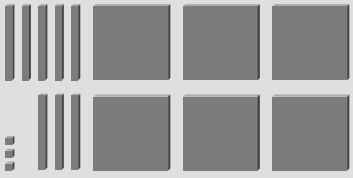
400 + 80 + 3

2. Represent the number 267 in expanded form.

200 + 60 + 7

Guided Practice

1. Fill in the table with the missing representations.

Base-ten diagram	Standard form	Expanded form
	254	200 + 50 + ____
	526	500 + ____ + ____
	367	_____ + ____ + ____
	683	

Guided Practice

2. Represent each number in expanded form.

Standard form	Expanded form
472	400 + 70 + _____
319	300 + _____ + _____
745	_____ + _____ + _____
583	
827	

Check

1. Represent the number 376 in expanded form.

_____

2. Represent the number 658 in expanded form.

_____

Name _____

Making Comparison Statements of Three-Digit Numbers True

ML 5.10

Modeled Review

Name: Avery

Use the numbers from the number bank to make each comparison statement true. Use each number only once.

483	265	624

1. 624 > 532

2. 376 < 483

3. 265 < 326

I used 624 first because that was the only number greater than 532.

Guided Practice

Use the numbers from the number bank to make each comparison statement true. Use each number only once.

734	~~518~~	465

1. 518 < 672

2. 496 > _____

3. _____ > 571

Guided Practice

Use the numbers from the number bank to make each comparison statement true. Use each number only once.

397	286	652	574

4. 317 > _____

5. _____ > 329

6. 623 < _____

7. _____ < 638

Check

Use the numbers from the number bank to make each comparison statement true. Use each number only once.

784	462	843	519

1. _____ > 796

2. 428 < _____

3. _____ < 816

4. 627 > _____

Name _____

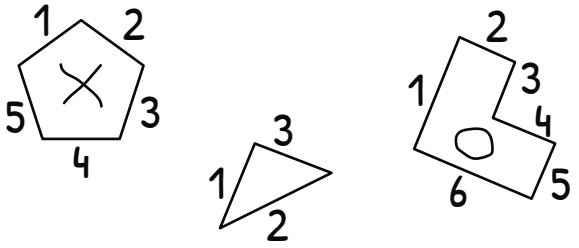
Identifying Shapes by Name

ML 6.02

Modeled Review

Name: Santiago

For Problems 1–2, use the following shapes.

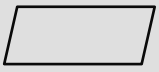


1. Put an **X** on the pentagon.

2. Put an **O** on the hexagon.

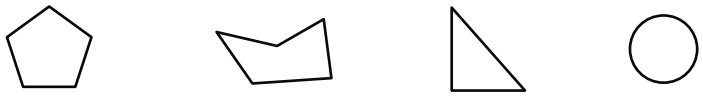
Guided Practice

Use the word bank to complete Problems 1–3.

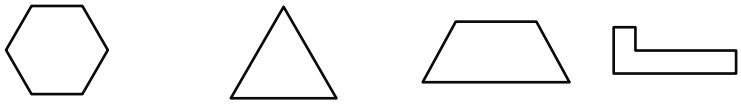
triangle	quadrilateral	pentagon	hexagon
			
3 sides, 3 corners	4 sides, 4 corners	5 sides, 5 corners	6 sides, 6 corners

1. Circle *all* the quadrilaterals.

2. Circle *all* the pentagons.

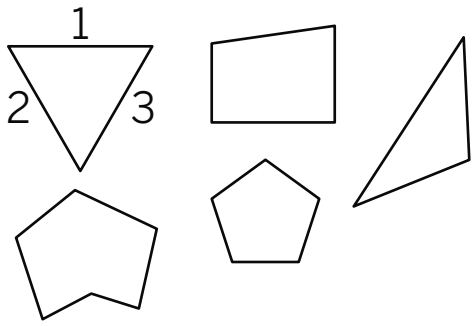


3. Circle *all* the hexagons.



Guided Practice

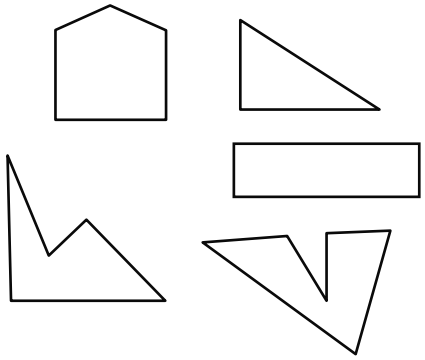
Use the following shapes for Problems 4–5.



4. Put an **X** on *all* the triangles.

5. Put an **O** on *all* the hexagons.

Use the following shapes for Problems 6–7.

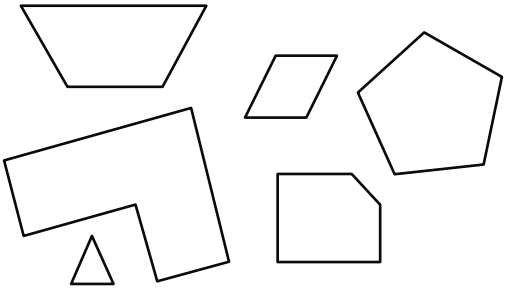


6. Put an **X** on *all* the quadrilaterals.

7. Put an **O** on *all* the pentagons.

Check

Use the following shapes for Problems 1–2.



1. Put an **X** on *all* the hexagons.

2. Put an **O** on *all* the pentagons.

Name _____

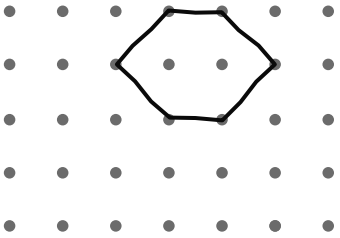
Drawing Shapes by Attributes

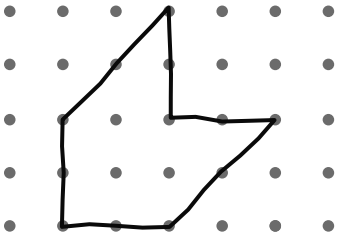
ML 6.04

Modeled Review

Name: Han

Draw *two* different hexagons.

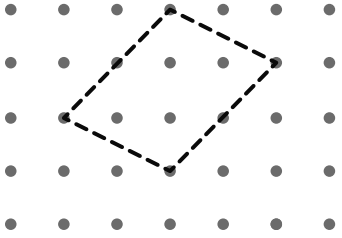


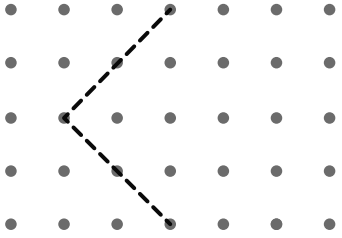


Guided Practice

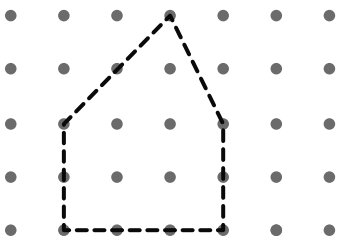
Draw *two* different versions of each shape.

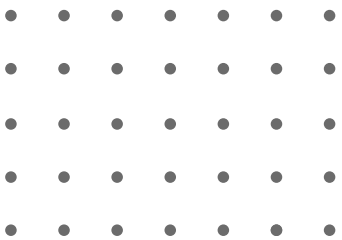
1. Quadrilaterals





2. Pentagons

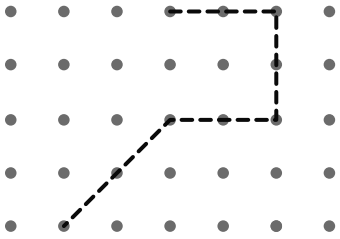


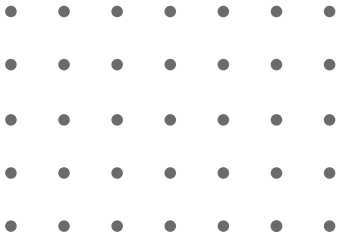


Guided Practice

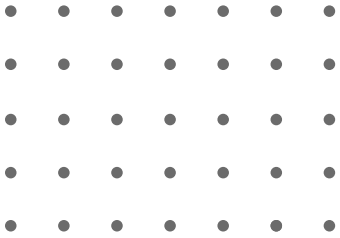
Draw *two* different versions of each shape.

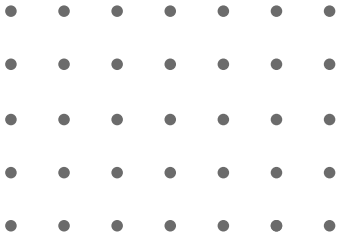
3. Hexagons





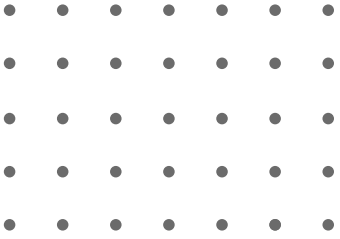
4. Quadrilaterals

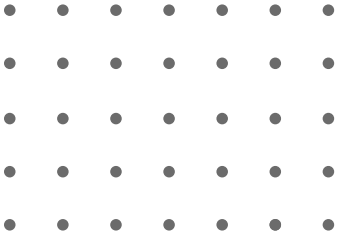




Check

Draw *two* different pentagons.





Name _____

Splitting Shapes Into Halves, Fourths, and Thirds

ML 6.09

Modeled Review

Name: Jada

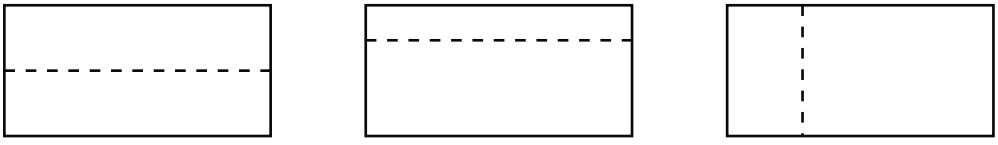
1. Split each shape into **3** equal parts. Then write the name of the parts.

The equal parts are called thirds.

Guided Practice

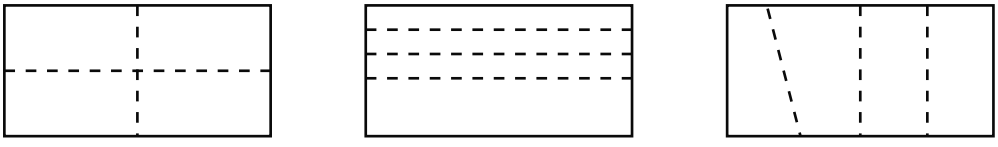
Draw an X on two rectangles in each row that are *not* examples.

1. halves



2. thirds

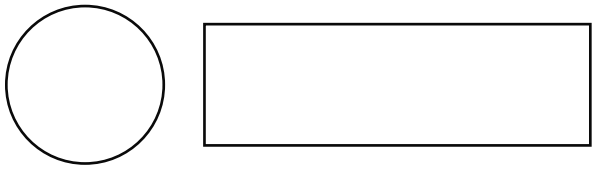
3. fourths



Guided Practice

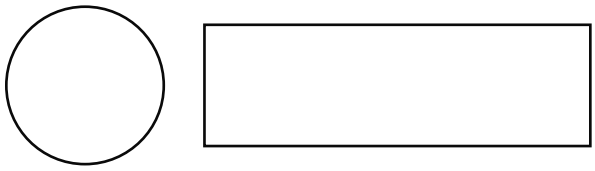
Split each shape into equal parts. Then write the name of the parts.

4. **2** equal parts



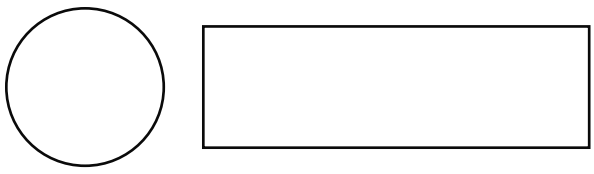
The equal parts are called _____.

5. **3** equal parts.



The equal parts are called _____.

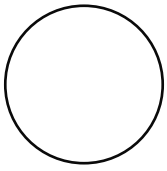
6. **4** equal parts



The equal parts are called _____.

Check

Split the circle into 4 equal parts. Then write the name of the parts.



The equal parts are called _____.

Name _____

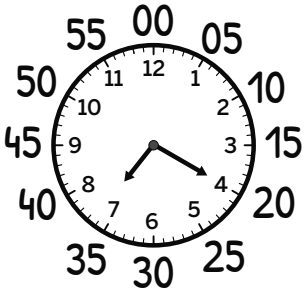
Telling Time by the 5-Minute

ML 6.13

Modeled Review

Name: Tristan

Write the time shown on the clock. Show how you found the time on the clock.

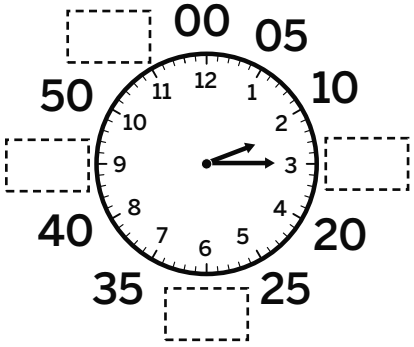


time: 7 : 20

Guided Practice

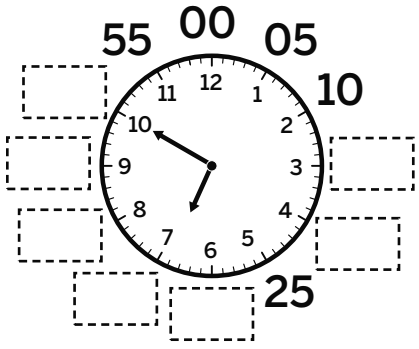
Label the missing numbers to show the time to the nearest 5 minutes. Then circle the time shown on the clock.

1.



3:10 2:15 1:15

2.

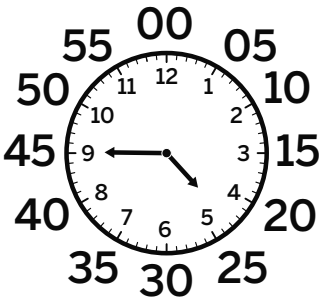


7:50 10:35 6:50

Guided Practice

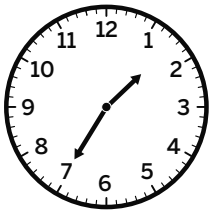
Write the time shown on the clock. Show how you found the time on the clock.

3.



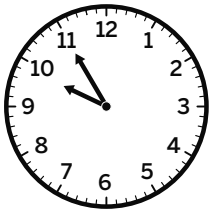
time: _____ : _____

4.



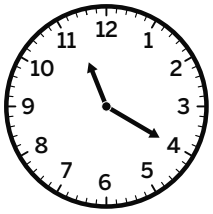
time: _____ : _____

5.



time: _____ : _____

6.

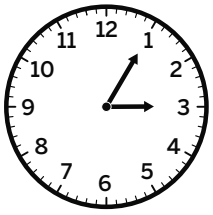


time: _____ : _____

Check

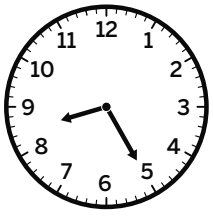
Write the time shown on the clock. Show how you found the time on the clock.

1.



time: _____ : _____

2.



time: _____ : _____

Name _____

Adding Numbers Within 1,000 Without Composing

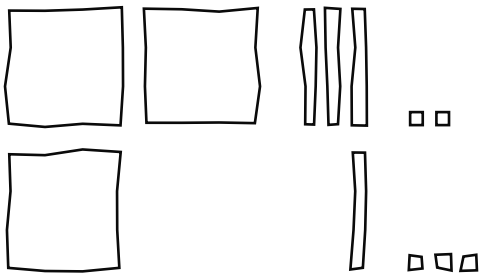
ML 7.03

Modeled Review

Name: Clare

Find the sum.

232 + 113

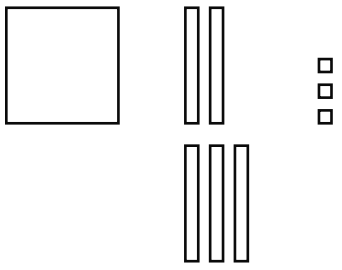


answer: 345

Guided Practice

Find the sum.

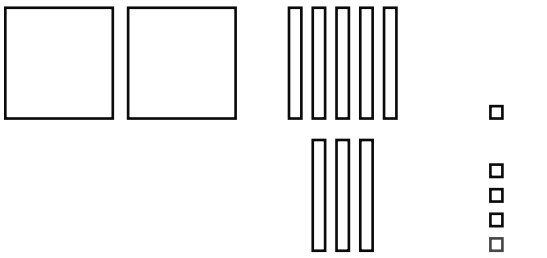
1. 123 + 30



100 + 50 + 3

answer: _____

2. 251 + 34



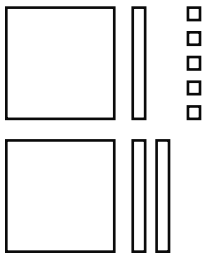
____ + ____ + ____

answer: _____

Guided Practice

Find the sum. Use base-ten blocks if it is helpful.

3. 115 + 120



answer: _____

4. 272 + 125

answer: _____

5. 352 + 224

answer: _____

6. 413 + 282

answer: _____

Check

Find the sum. Use base-ten blocks if it is helpful.

451 + 323

answer: _____

Name _____

Adding by Place Value Using Equations

ML 7.07

Modeled Review

Name: Shawn

Find the sum.

786 + 121 = 907

6 + 1 = 7
80 + 20 = 100
700 + 100 = 800

7 + 100 + 800 = 907

Name: Clare

Find the sum.

786 + 121 = 907

700 + 100 = 800
80 + 20 = 100
6 + 1 = 7

800 + 100 + 7 = 907

Guided Practice

Complete each equation to find the sum

1. 32 + 64

Add ones: 2 + 4 = 6

Add tens: 30 + 60 = 90

6 + 90 = ___

answer: _____

2. 145 + 132

Add hundreds: 100 + 100 = ____

Add tens: 40 + ___ = ____

Add ones: 5 + ___ = ____

____ + ___ + ___ = ____

answer: _____

Guided Practice

Find the sum. Show your thinking.

3. 142 + 325

100 + ____ = ____

40 + ____ = ____

2 + ____ = ____

____ + ____ + ____ = ____

answer: _____

4. 223 + 318

3 + 8 = 11

____ + ____ = ____

____ + ____ = ____

____ + ____ + ____ = ____

answer: _____

5. 476 + 241

____ + ____ = ____

____ + ____ = ____

____ + ____ = ____

____ + ____ + ____ = ____

answer: _____

6. 485 + 167

answer: _____

Check

Find the sum. Show your thinking.

357 + 481

answer: _____

Name _____

Using Place Value to Subtract Within 1,000

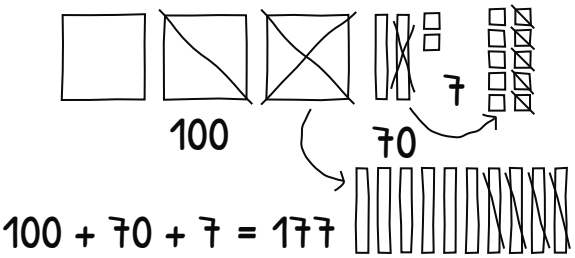
ML 7.15

Modeled Review

Name: Avery

Find the difference.

322 – 145 = 177



100 + 70 + 7 = 177

Name: Clare

Find the difference.

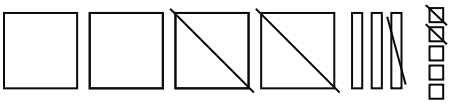
322 – 145 = 177

322 = 200 + 110 + 12
200 – 100 = 100
110 – 40 = 70
12 – 5 = 7
100 + 70 + 7 = 177

Guided Practice

Find the difference. Show your thinking.

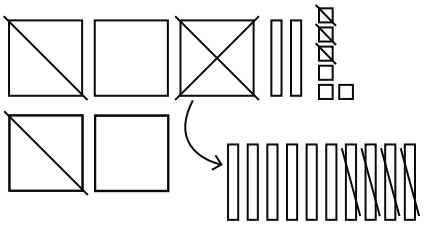
1. 435 – 212



435 = 400 + 30 + 5
212 = 200 + 10 + 2
400 – 200 = 200
30 – 10 = ____
____ – ____ = ____
____ + ____ + ____ = ____

answer: _____

2. 526 – 243



526 = 400 + 120 + 6
243 = 200 + 40 + 3
400 – 200 = ____
____ – ____ = ____
____ – ____ = ____
____ + ____ + ____ = ____

answer: _____

Guided Practice

Find the difference. Show your thinking.

3. 778 – 351

answer: _____

4. 634 – 118

answer: _____

5. 465 – 182

answer: _____

6. 734 – 567

answer: _____

Check

Find the difference. Show your thinking.

425 – 267

answer: _____

Name _____

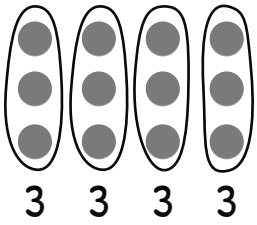
Representing Arrays With Equations

ML 8.10

Modeled Review

Name: Eva

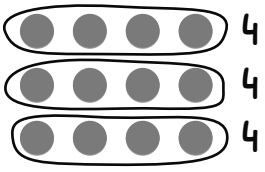
Write an equation that represents the total number of counters in the array.



equation: 3 + 3 + 3 + 3 = 12

Name: Avery

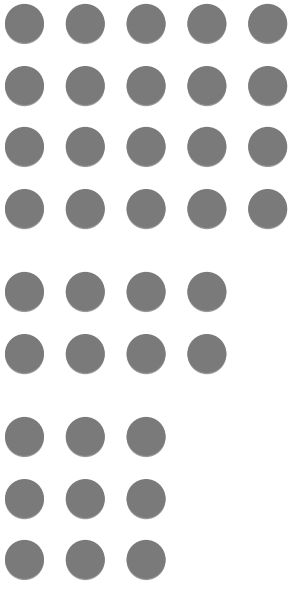
Write an equation that represents the total number of counters in the array.



equation: 4 + 4 + 4 = 12

Guided Practice

1. Draw a line from the array to its matching equation.



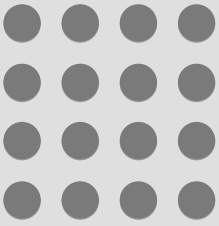
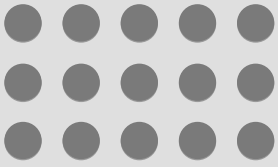
3 + 3 + 3 = 9

5 + 5 + 5 + 5 = 20

2 + 2 + 2 + 2 = 8

Guided Practice

2. Write an equation that represents each array.

Array	Equation
	2 + 2 + 2 + 2 + 2 = ____
	4 + 4 + ____ + ____ = ____
	

Check

Write an equation that represents the array.

equation: _____

Name _____

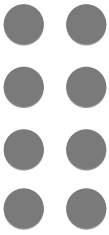
Writing Equations to Match Arrays

ML 8.11

Modeled Review

Name: Eva

Write *two* equations that represent the array.



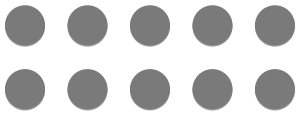
equation 1: 2 + 2 + 2 + 2 = 8

equation 2: 4 + 4 = 8

Guided Practice

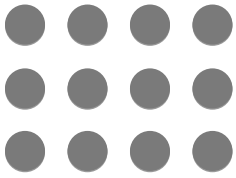
Circle *all* expressions that represent the array.

1.



5 + 5 + 5 + 5 + 5 5 + 5 2 + 2 + 2 + 2 + 2 2 + 2

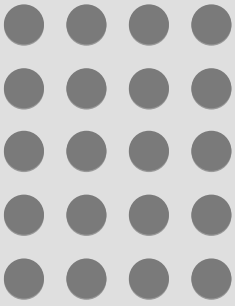
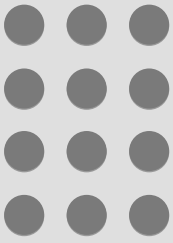
2.



3 + 3 + 3 + 3 3 + 3 + 3 4 + 4 + 4 + 4 4 + 4 + 4

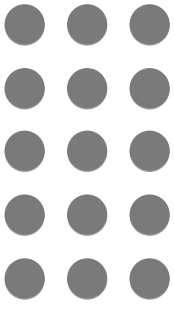
Guided Practice

3. Write *two* equations that represent each array.

Array	Equation 1	Equation 2
	4 + 4 + 4 + 4 + 4 = 20	5 + 5 + 5 + 5 = ____
	2 + 2 + 2 = 6	
	3 + 3 + 3 + 3 = ____	
		

Check

Write *two* equations that represent the array.



equation 1: _____

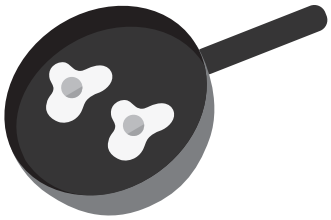
equation 2: _____

Extensions

Introduction to Multiplication

Name _____ Date _____

Diego plans to cook 3 eggs "over easy," which means fried on both sides.



His frying pan fits only 2 eggs.

Diego needs to fry the eggs for 2 minutes on each side.

1 Diego says he can fry all 3 eggs in 6 minutes. What is 1 way he can do this?

Show or explain your thinking.

Introduction to Multiplication (continued)

Name _____ Date _____

2 Using the same strategy, what is the minimum number of minutes Diego needs to fry 5 eggs?

Show or explain your thinking.

answer: _____

3 What is the minimum number of minutes Diego needs to fry 11 eggs?

Show or explain your thinking.

answer: _____

Introduction to Multiplication (continued)

Name _____ Date _____

4 A rectangular table has 8 columns of numbers. The sum of the numbers in each column is 10, and the sum of the numbers in each row is 20. How many rows are there in the table?

Show or explain your thinking.

answer: _____

Arrays

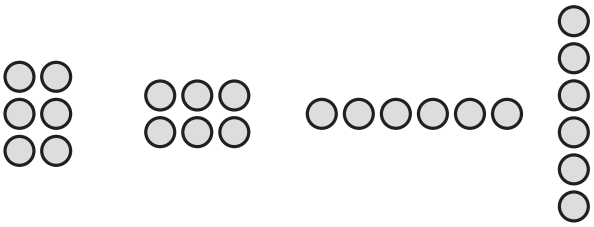
Name _____ Date _____

2 circles

2 different arrays can be made using 2 circles.

6 circles

4 different arrays can be made using 6 circles.



1 Complete each table to show the number of different arrays that can be made with the number of circles.

Number of circles	Number of different arrays
5	
6	4
7	
8	
9	
10	
11	
12	

Number of circles	Number of different arrays
13	
14	
15	
16	
17	
18	
19	
20	

Arrays (continued)

Name _____ Date _____

2 Which gives the most arrays – even numbers of circles or odd numbers of circles?

Can you identify a number of circles that produces more than 10 arrays? Explain your thinking.

Look at all the numbers that produce an odd number of arrays. What is the same about these numbers?

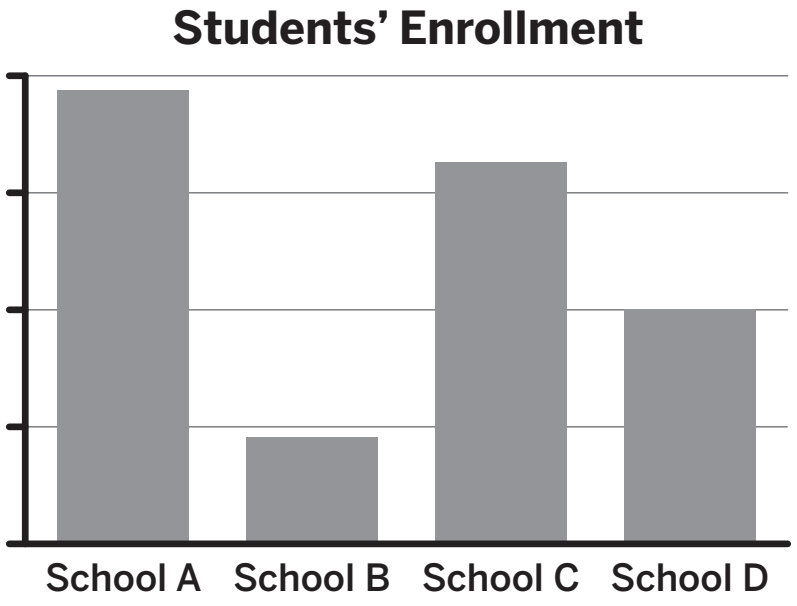
Look at all the numbers that produce the least number of arrays. What is the same about these numbers?

Data in Scaled Graphs

Name _____ Date _____

You Choose! Pick any problem to start with.

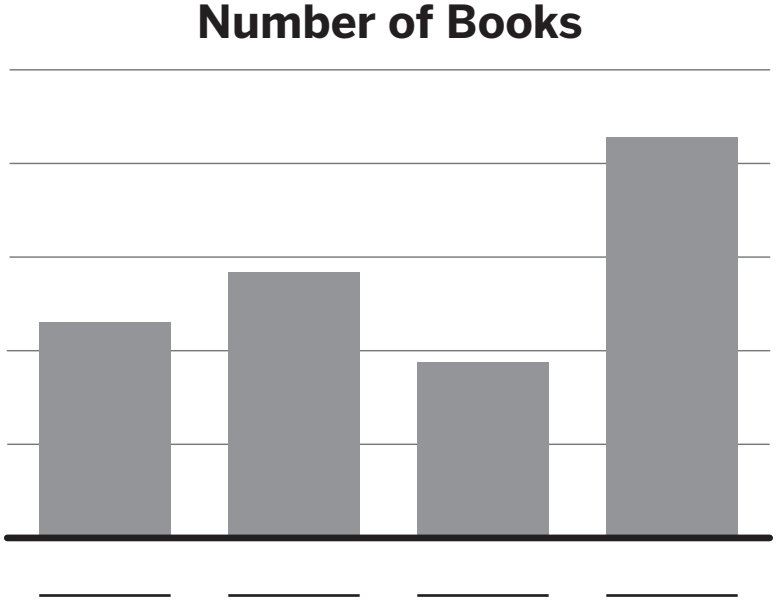
1 There are 1,000 students at the 4 schools. The data is shown on the bar graph. What is the approximate scale for the bar graph? Explain your thinking.



Data in Scaled Graphs (continued)

Name _____ Date _____

2 Jada, Clare, Han, and Priya compared the number of books they have in their home libraries. Jada has more books than Han but less than Clare. Priya has more books than Clare. They created a bar graph to show the number of books they have. Label each bar with the correct student's name.



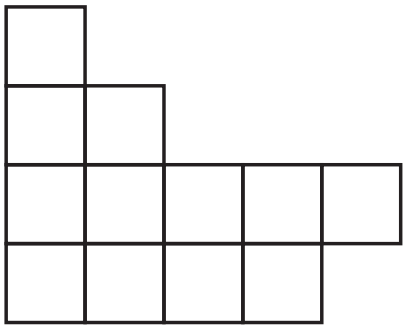
Concepts of Area Measurement

Name _____ Date _____

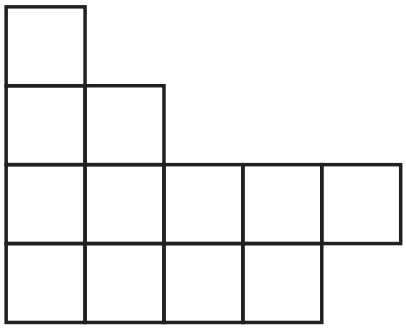
You Choose! Pick any problem to start with.

1

Decompose the shape into 3 parts that have the same area.

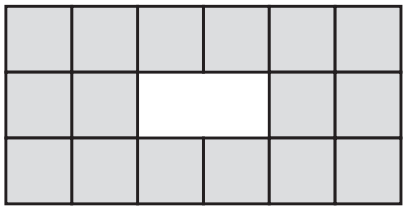


Decompose the shape into 3 parts that have the same shape and the same area.



2

Decompose the shaded shape into 2 parts that can be combined into 1 rectangle.



Relating Area to Multiplication

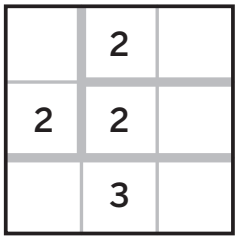
Name _____ Date _____

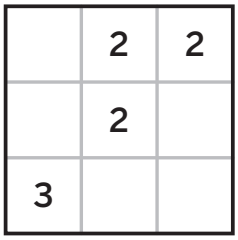
You Choose! Pick any problem to start with.

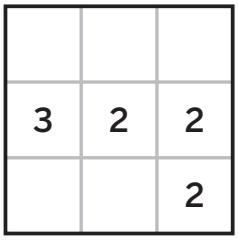
1

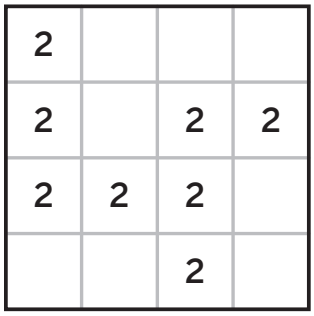
Decompose each grid into rectangular pieces so that each piece contains exactly 1 number, and that number represents the area of the rectangle.

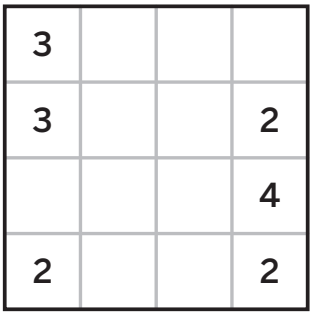
The first one is done for you.

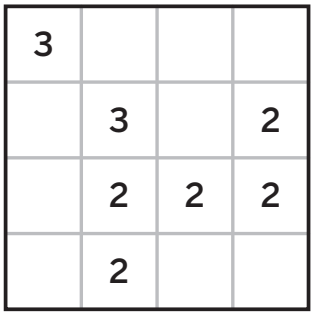








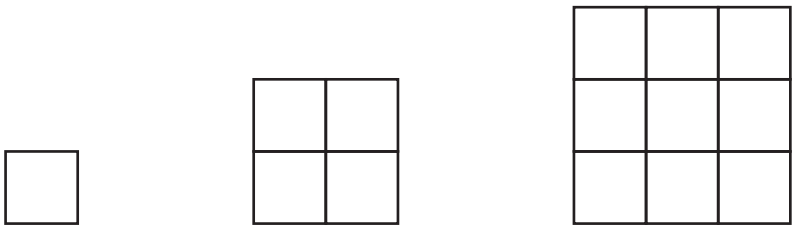




Relating Area to Multiplication (continued)

Name _____ Date _____

2 Here are the first 3 figures in a pattern. Each figure is composed of identical square tiles.



What is the difference between the areas of the 3rd and 4th figures?

What is the difference between the areas of the 6th and 7th figures?

What is the difference between the areas of the 20th and 21st figures?

Show or explain your thinking.

answer: _____

Determining Area of Figures Composed of Rectangles

Name _____ Date _____

You Choose! Pick any problem to start with.

1

The largest rectangle is made up of smaller squares. The area of the shaded square is 9 square units.

Determine the area of the largest rectangle.

Show or explain your thinking.

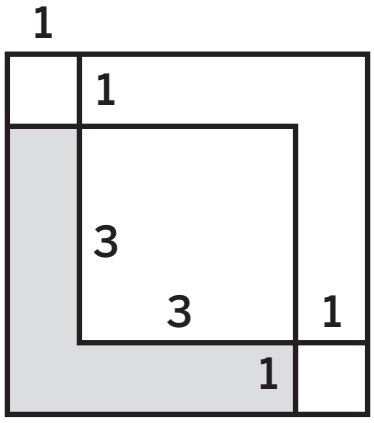
answer: _____

Determining Area of Figures Composed of Rectangles (continued)

Name _____ Date _____

2 Here is a square with smaller squares inside it. The side lengths of the smaller squares are labeled.

Determine the area of the shaded region in square units.



Show or explain your thinking.

answer: _____

Adding Within 1,000

Name _____ Date _____

1 Fill in the empty spaces with the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9 to make the equation true. You can use each digit as many times as you need. If it is not possible, explain why not.

$$\square\square + 7 = 2\square 1$$

$$\square + \square = 3\square$$

$$\square 6 + \square 7 = \square\square 0$$

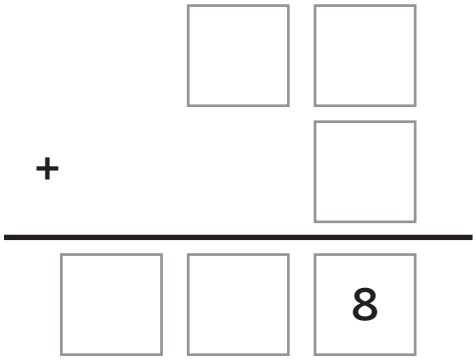
$$3\square\square + \square\square = 6\square\square$$

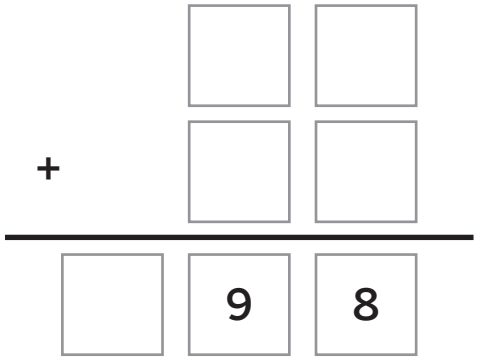
Adding Within 1,000 (continued)

Name _____ Date _____

2

Fill in the empty spaces with the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9 to make each column calculation true. You can use each digit as many times as you need.





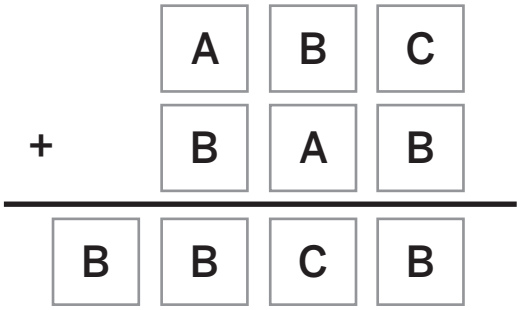
3

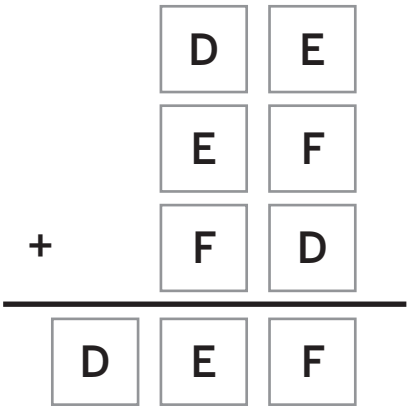
In each puzzle, the same letter represents the same number. Solve each puzzle.

Here is an example.

A	+	B	=	B	K
9	+	1	=	1	0

A must be 9.
B must be 1.
K must be 0.





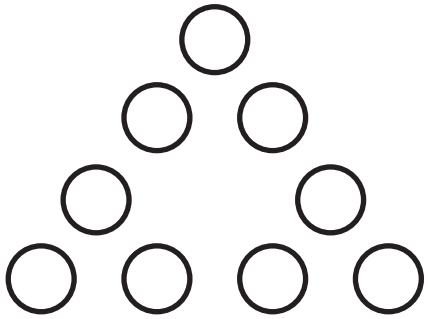
Subtracting Within 1,000

Name _____ Date _____

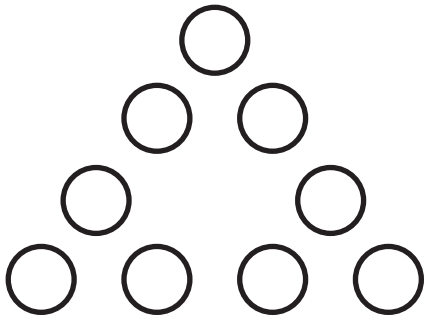
You Choose! Pick any problem to start with.

1

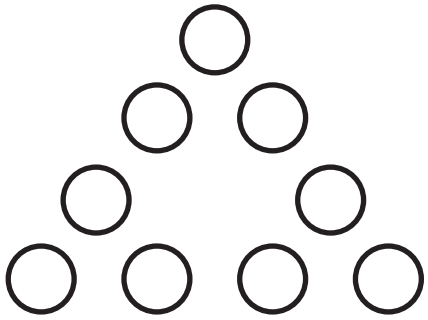
Fill in the empty circles with the numbers 11–19 so the sum on each side of the triangle is 57.



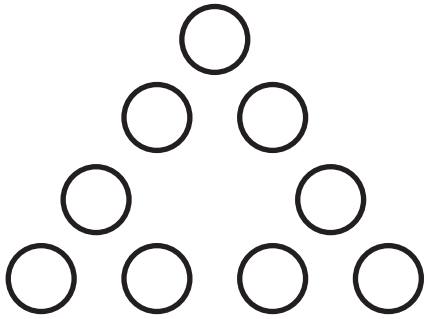
Fill in the empty circles with the numbers 11–19 so the sum on each side of the triangle is 59.



Fill in the empty circles with the numbers 11–19 so the sum on each side of the triangle is 61.



Fill in the empty circles with the numbers 11–19 so the sum on each side of the triangle is 63.



Subtracting Within 1,000 (continued)

Name _____ Date _____

2

In the puzzle, the same letter represents the same number. Solve the puzzle.

Here is an example.

A	+	B	=	B	K

A must be 9.
B must be 1.
K must be 0.

9	+	1	=	1	0

	A	C	B
−	B	A	C
	B	C	A

3

Han thinks of a number. He subtracts the sum of the digits from that number. Then Han continues to do the same steps, subtracting the sum of the digits from the result. He did this a total of 10 times and stops when the result is 0. What number could Han have been thinking of?

Show or explain your thinking.

answer: _____

Rounding Within 1,000

Name _____ Date _____

You Choose! Pick any problem to start with.

1 Each concert ticket costs the same amount of money. Shawn buys 4 concert tickets and rounds the total to the nearest hundred. If the total is $500, what is the least amount each ticket could cost? What is the greatest amount each ticket could cost?

Show or explain your thinking.

least: _____

greatest: _____

Rounding Within 1,000 (continued)

Name _____ Date _____

2 Priya wants to estimate the sum of 2 numbers. Jada and Diego agree to help her. Jada will round each number first and then add. Diego will add the numbers first and then round the sum.

What are 2 numbers that will result in the same sum for Jada and Diego?

Show or explain your thinking.

What are 2 numbers that will result in a different sum for Jada and Diego?

Show or explain your thinking.

Solving Two-step Problems

Name _____ Date _____

You Choose! Pick any problem to start with.

1 A 30-inch ribbon was cut into 3 pieces. The first piece was 1 inch longer than the second piece and 1 inch shorter than the third piece. Determine the length of each piece in inches.

Show or explain your thinking.

1st piece: _____

2nd piece: _____

3rd piece: _____

2 Priya cut a rope into 3 pieces. The length of the first and the second pieces together is 35 inches, the length of the second and the third pieces together is 25 inches, and the length of the first and the third pieces together is 30 inches. What was the original length of Priya's rope?

Show or explain your thinking.

answer: _____

Solving Two-step Problems (continued)

Name _____ Date _____

3 Here are statements about different sets of 2 unknown numbers.

The sum of 2 numbers is 7 and the difference is 3.

The sum of 2 numbers is 7 and the difference is 1.

The sum of 2 numbers is 12 and the difference is 2.

The sum of 2 numbers is 36 and the difference is 10.

The sum of 2 numbers is 49 and the difference is 15.

Solve each problem. What pattern do you see? How could you solve these problems without guessing and checking?

Show or explain your thinking.

What Is Division?

Name _____ Date _____

You Choose! Pick any problem to start with.

1

There are 7 full, 7 half-full, and 7 empty jars of honey. Divide the jars between 3 people so that everyone has the same number of jars and the same amount of honey.

full half-full empty

Show or explain your thinking.

2

In the puzzle, the same letter represents the same number. Solve the puzzle.

$$(\boxed{A} + \boxed{A}) \div \boxed{A} = \boxed{A}$$

Show or explain your thinking.

Letter A: _____

What Is Division? (continued)

Name _____ Date _____

3 There are 3 boards with stones on them. The first board has 8 stones, the second board has 3 stones, and the third board has 1 stone. You can only move stones from one board to another if you move the same number of stones the board already has.

Can you move the stones so that each board ends with the same number of stones?

Yes No

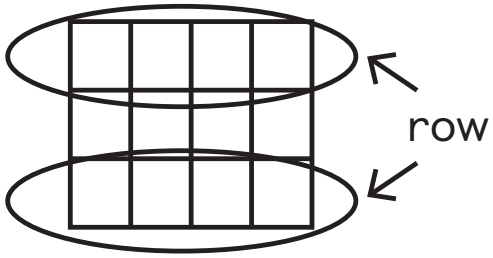
Show or explain your thinking.

Relating Multiplication and Division

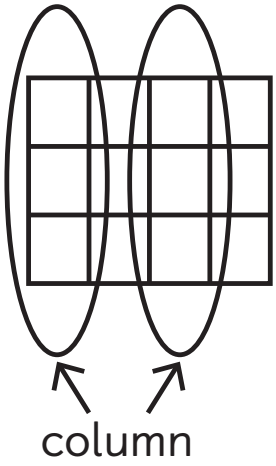
Name _____ Date _____

You Choose! Pick any problem to start with.

Rows



Columns



1

Each bordered region contains a target number and an operation.

Fill in the grid with the numbers given to reach the target using the given operation. Each row and each column uses each number only once.

Here is an example.

1, 2, 3

3+ 1	5+ 2	3 3
2	3	1– 1
2– 3	1	2

3+	1 + 2 = **3**
5+	2 + 3 = **5**
3	**3**
2–	3 – 1 = **2**
1–	2 – 1 = **1**

1, 2, 3

3÷	2×	
	3×	6×
2		

1, 2, 3

3×		2÷
6×	2÷	
		3

1, 2, 3, 4

12×	3	2÷	
	4×		6×
	24×		
2÷			

Relating Multiplication and Division (continued)

Name _____ Date _____

2

Here is a multiplication table.

	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

2 + **4** + 2

3 + 6 + **9** + 6 + 3

4 + 8 + 12 + **16** + 12 + 8 + 4

Three shapes are outlined and the numbers added together. What pattern do you see? Check the pattern you found using larger corners of the multiplication table.

Show or explain your thinking.

3

How many odd numbers are less than 100?

_____

How many even numbers are less than 100?

_____

Multiplying Larger Numbers

Name _____ Date _____

You Choose! Pick any problem to start with.

1

Decompose each grid into rectangular pieces so that each piece contains exactly 1 number, and that number represents the area of the rectangle.

Here is an example.

3		3		
				2
	3	2		2
			4	2
			4	

				2
2		4		
		3	2	4
3	3		2	

2	2	3		
		3		
	2			
			4	2
3			4	

Multiplying Larger Numbers (continued)

Name _____ Date _____

2 How many zeros are at the end of each product?

$1 \times 2 \times 3 \times 4 \times 5$

Show or explain your thinking.

answer: _____

$1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 \times 9 \times 10$

Show or explain your thinking.

answer: _____

The product of all the whole numbers from 1 to 16

Show or explain your thinking.

answer: _____

The product of all the whole numbers from 1 to 100

Show or explain your thinking.

answer: _____

Dividing Larger Numbers

Name _____ Date _____

You Choose! Pick any problem to start with.

1 Clare wants to buy 8 pens but is $2 short. If she buys 5 pens, she will have $10 left. How much does each pen cost?

Show or explain your thinking.

answer: _____

2 A bicyclist made a 600-mile trip on her two-wheel bike. She used a spare wheel to replace either of the 2 original wheels. If each of the 3 wheels made the same mileage, how many miles did each wheel travel?

Show or explain your thinking.

answer: _____

Dividing Larger Numbers (continued)

Name _____ Date _____

3 Here are statements about different sets of 2 unknown numbers.

The product of 2 numbers is 18 and the quotient is 2.

The product of 2 numbers is 16 and the quotient is 4.

The product of 2 numbers is 48 and the quotient is 3.

The product of 2 numbers is 72 and the quotient is 2.

Determine the answer for each problem. What pattern do you see? How could you solve these problems without guessing and checking?

Show or explain your thinking.

Introduction to Fractions

Name _____ Date _____

You Choose! Pick any problem to start with.

1

Shawn has 3 apple halves, and Clare has 2 whole apples and 1 apple half. How can Shawn and Clare divide the apples equally between 4 people?

Show or explain your thinking.

answer: _____

2

Han and Diego have equal amounts of money. How much money should Diego give Han so that Han has twice as much money as Diego?

Show or explain your thinking.

answer: _____

Introduction to Fractions (continued)

Name _____ Date _____

3 6 pirates divide their gold treasure. The first pirate took $\frac{1}{6}$ of the total amount, the second took $\frac{1}{5}$ of the remaining amount, the third took $\frac{1}{4}$ of the rest, the fourth took $\frac{1}{3}$ of what was left, and the fifth and sixth pirates split the remaining gold treasure equally. Which pirate received the largest share of the treasure?

Show or explain your thinking.

answer: _____

Fractions on the Number Line

Name _____ Date _____

You Choose! Pick any problem to start with.

1 You have a piece of rope that measures 1 yard. How could you measure $\frac{3}{8}$ yards without a ruler?

Show or explain your thinking.

Fractions on the Number Line (continued)

Name _____ Date _____

2 Han says that he can locate 1 on the number line without locating $\frac{1}{8}$. What could be Han's method?

Show or explain your thinking.

Equivalent Fractions

Name _____ Date _____

You Choose! Pick any problem to start with.

1 Jada added a number to both the numerator and denominator of the fraction $\frac{7}{11}$ and got a fraction equivalent to $\frac{3}{4}$. What number did she add?

Show or explain your thinking.

answer: _____

Equivalent Fractions (continued)

Name _____ Date _____

2 Determine a fraction so that if you add 4 to the numerator and 10 to the denominator, the result will be an equivalent fraction.

Show or explain your thinking.

answer: _____

Is there a fraction that if you add the same number to the numerator and the denominator, the result will be an equivalent fraction?

Show or explain your thinking.

Fraction Comparisons

Name _____ Date _____

You Choose! Pick any problem to start with.

1

Choose a fraction you can compare with $\frac{3}{8}$ and $\frac{5}{6}$ by looking at the numerators and denominators.

Show or explain your thinking.

answer: _____

2

25 postage stamps cost more than $12, and 8 postage stamps cost less than $4. How much does 1 postage stamp cost?

Show or explain your thinking.

answer: _____

Measurement Data on Line Plots

Name _____ Date _____

You Choose! Pick any problem to start with.

1

For each length, choose an object in the classroom that you think will be close to that length.

Length	Object
$1\frac{1}{2}$ inches	
7 inches	
33 inches	

Measure each object using a ruler marked in $\frac{1}{4}$ inches. Was each estimate too high, too low, or just right?

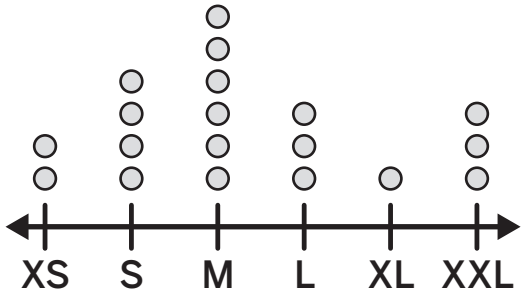
Show or explain your thinking.

Measurement Data on Line Plots (continued)

Name _____ Date _____

2 Jada was putting away her family's gloves and made the line plot of the number of gloves each family member has. Her sister Priya has more gloves than her brother Diego but fewer than her Dad. Her Dad has the same number of gloves as Jada. Her Mom has more gloves than her Dad but still fewer than Jada's other sister, Clare.

Determine the size of the gloves for each member of her family. Each family member only wears 1 size glove.



Glove Size

Family member	Glove size
Mom	
Dad	
Jada	
Priya	
Diego	
Clare	

Weight and Liquid Volume

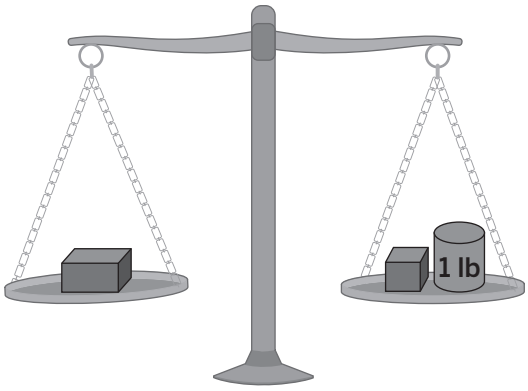
Name _____ Date _____

You Choose! Pick any problem to start with.

1

A brick weighs 1 pound and another half a brick.

How much does 1 brick weigh?



Show or explain your thinking.

answer: _____

Weight and Liquid Volume (continued)

Name _____ Date _____

2 Place stones weighing 1, 2, 3, 4, 5, and 6 kilograms into 3 piles that weigh the same.

Place stones weighing 1, 2, 3, 4, 5, 6, 7, 8, and 9 kilograms into 3 piles that weigh the same.

Can you place stones weighing 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 kilograms into 3 piles that weigh the same?

Show or explain your thinking.

Problems Involving Time

Name _____ Date _____

1 What is longer — 1 day or 1,000 minutes?

Show or explain your thinking.

answer: _____

What is longer — 1 year or 1,000,000 seconds?

Show or explain your thinking.

answer: _____

Problems Involving Time (continued)

Name _____ Date _____

2 When will you be 4,000 days old?

Show or explain your thinking.

answer: _____

3 How can you measure 4 minutes using 5-minute and 7-minute sandglasses?

Show or explain your thinking.

Measurement Problems in Context

Name _____ Date _____

You Choose! Pick any problem to start with.

1

An apple and an avocado are heavier than 2 apples by 1 pound. Which is heavier, the apple or the avocado, and by how much?

Show or explain your thinking.

answer: _____

2

A tank full of water weighs 10 pounds, and a half full tank weighs 6 pounds. What is the weight of an empty tank?

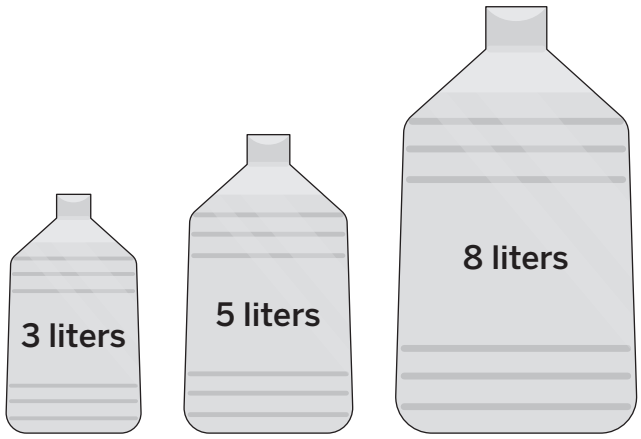
Show or explain your thinking.

answer: _____

Measurement Problems in Context (continued)

Name _____ Date _____

3 Here are 3 containers. The first holds 3 liters, the second holds 5 liters, and the third holds 8 liters.



The third container is full with 8 liters of water, and the other 2 containers are empty. How could you use the 3 containers to fill 2 containers with 4 liters of water?

Show or explain your thinking.

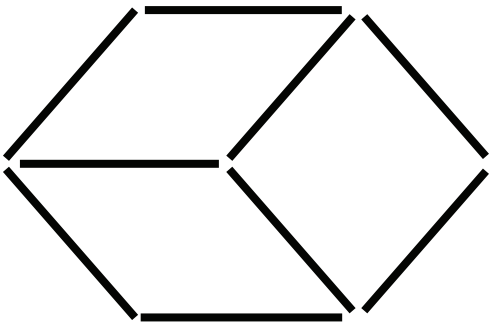
Reasoning With Shapes

Name _____ Date _____

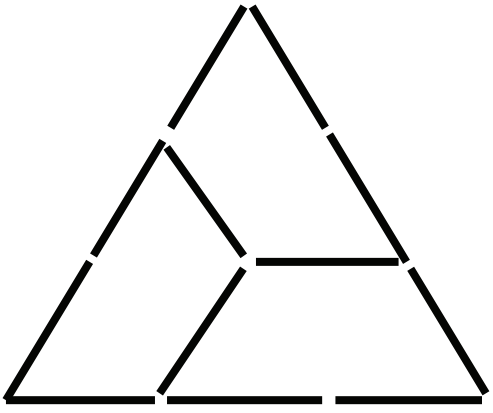
You Choose! Pick any problem to start with.

1

Move 3 toothpicks to make 3 triangles.



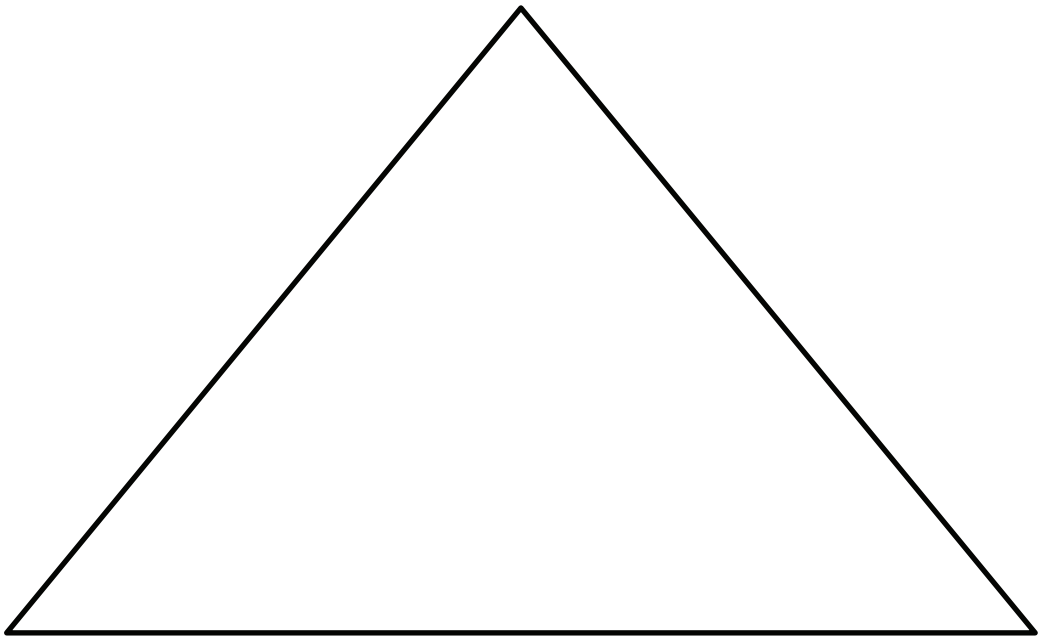
Move 3 toothpicks to make 3 rhombuses.



Reasoning With Shapes (continued)

Name _____ Date _____

2 Cut the triangle into 4 smaller triangles so that each smaller triangle shares a part of its side with all the other triangles.

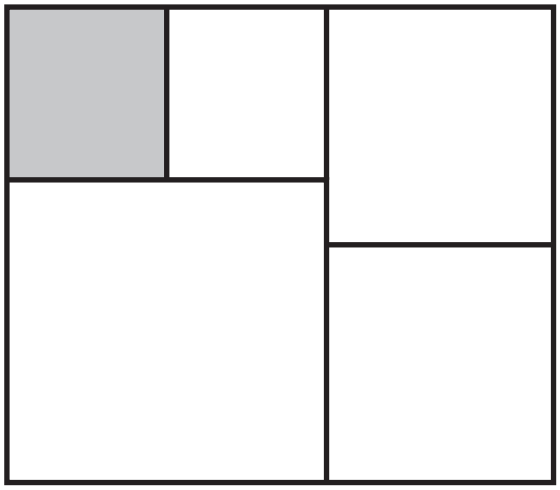


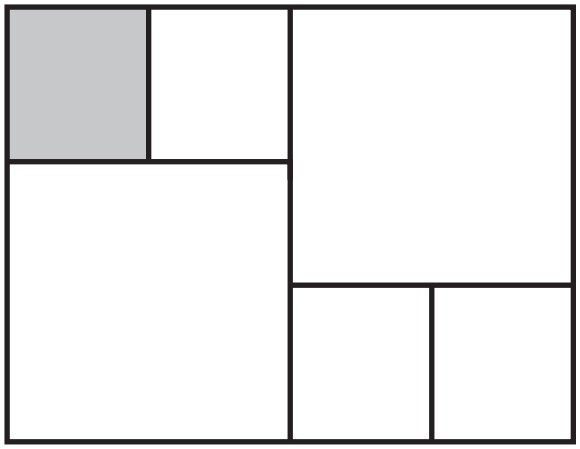
What Is Perimeter?

Name _____ Date _____

You Choose! Pick any problem to start with.

1 Each rectangle was split into squares. Determine the perimeter of each rectangle if the side of the shaded square is 3 inches.

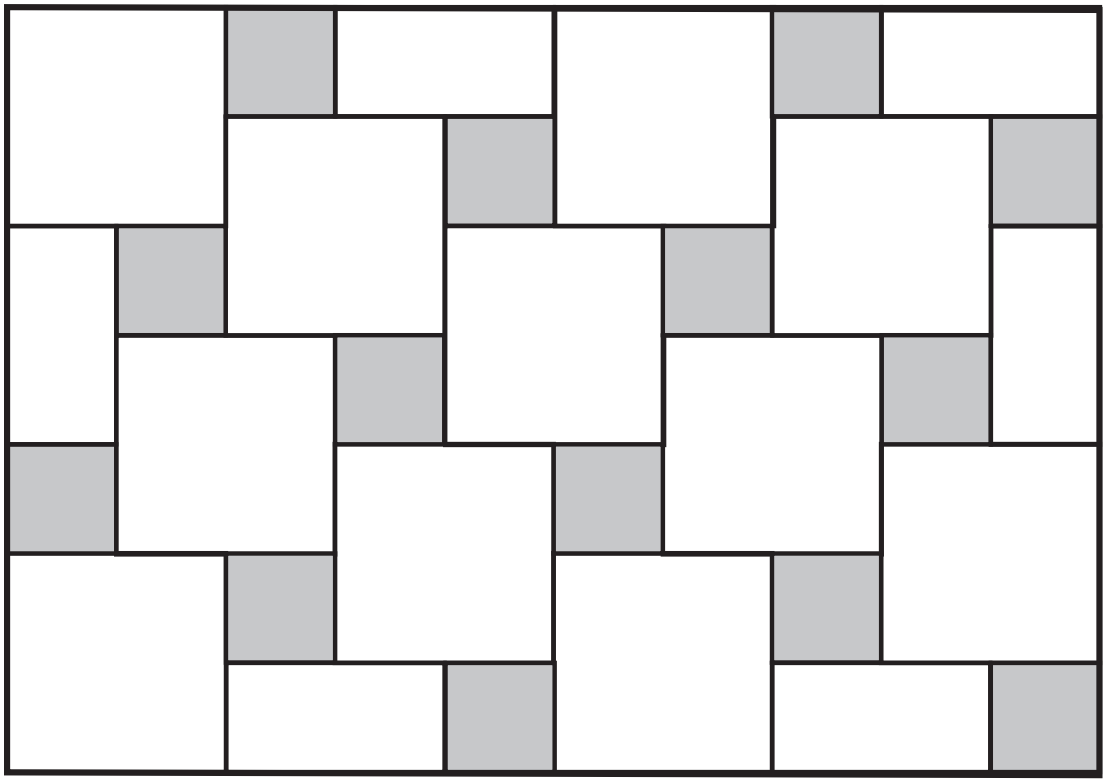




What Is Perimeter? (continued)

Name _____ Date _____

2 The side of the small square is 6 inches. What is the perimeter of the entire design?

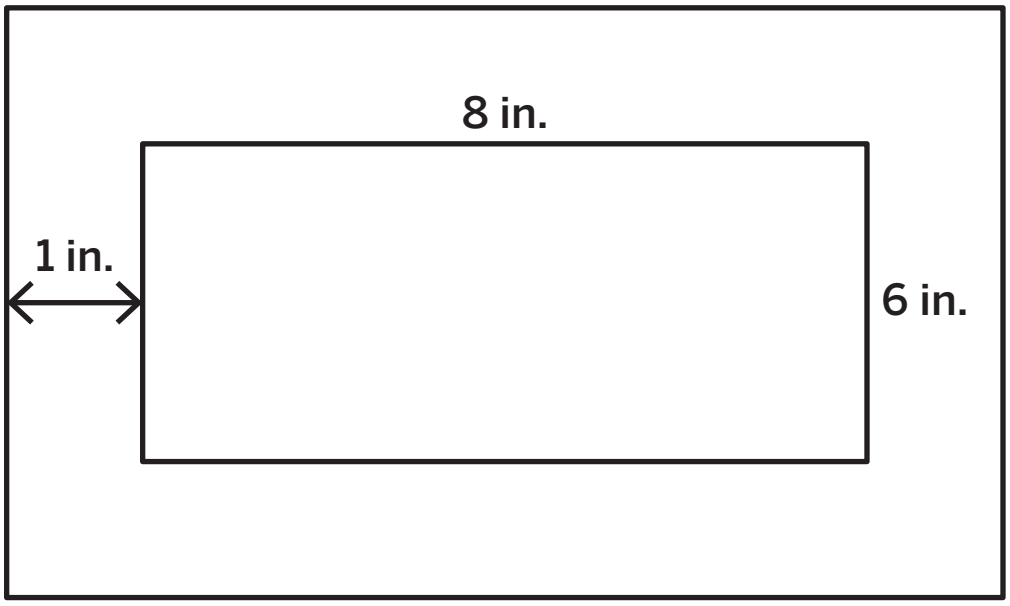


Expanding on Perimeter

Name _____ Date _____

You Choose! Pick any problem to start with.

1 Han framed an 8-inch by 6-inch photo using 1-inch planks. What is the perimeter of the framed photo?

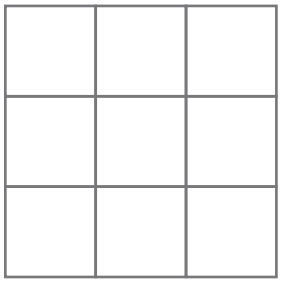


Expanding on Perimeter (continued)

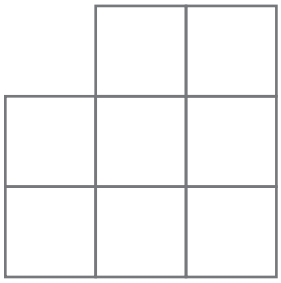
Name _____ Date _____

2 Here are 2 shapes made up of 1-unit squares.

This shape has an area of 9 square units and a perimeter of 12 units.



This shape has an area of 8 square units and a perimeter of 12 units.



Draw other shapes made up of 1-unit squares with a perimeter of 12 units and determine their area. Try to make the smallest possible area.

Investigations

Investigation 1

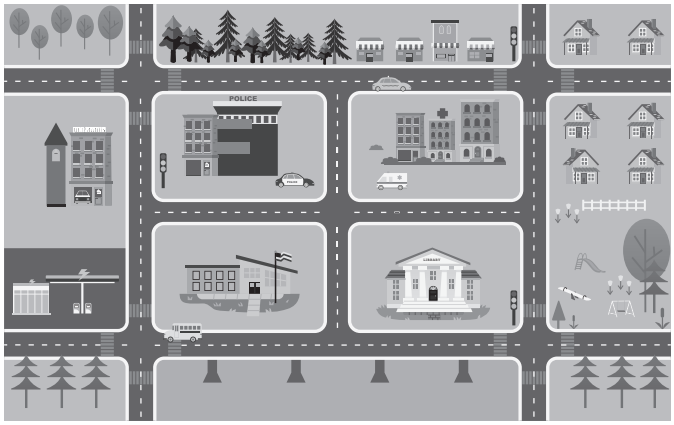
Rectangle City

CC2 Number Flexibility to 100 CC3 Square Tiles 3.MD.5, 3.MD.7.a, 3.MD.7.b, 3.MD.7.d, 3.OA.3, SMP.1, SMP.2, SMP.6, SMP.7

Task 1

Name _____ Date _____

What's in a City?



1 Discuss

- What buildings or sites do you see in the picture?
- What is missing that you think belongs in a city?

Task 1

Name _____ Date _____

What's in a City? (continued)

2 Use the list created as a class and choose 5–10 buildings, structures, or city sites that you want to include in your city. You *must* include a park, a school, a library, and a body of water.

List of Buildings in Your City

Task 1

Name _____ Date _____

What's in a City? (continued)

3 List the buildings or sites in your city in order from smallest area to largest area.

List of Buildings in Order by Area	
	Smallest
	Largest

Task 2

Name _____ Date _____

City Planner

1 Discuss

What should you consider when planning your city to help protect the environment?

2 Hands-On

Use the grid paper to create your city. Each square on the grid is equal to 1 square unit. Label the name of your buildings and city sites and include the measurements of the side lengths.

Your city must include the following:

- The name of your city
- 5–10 buildings
- A park with an area of 60 square units
- A pond or a lake
- A library with a side length of 5 units and an area of less than 35 square units
- A school with an area greater than the library and less than the park
- A building composed of at least 2 rectangles with a total area greater than 10 square units

Task 2

Name _____ Date _____

City Planner (continued)

3 Record the areas of your buildings and city sites.

Building/City site	Area

Task 2

Name _____ Date _____

City Planner (continued)

4 How did you decide how to draw the library in your city?

5 How did you decide how to draw the school in your city?

Task 3

Name _____ Date _____

Road Trip!

1 Visit your classmates' cities. Record a city site in each of the cities that you visit, and include the area of that site.

City name	City site	Area

Task 3

Name _____ Date _____

Road Trip (continued)

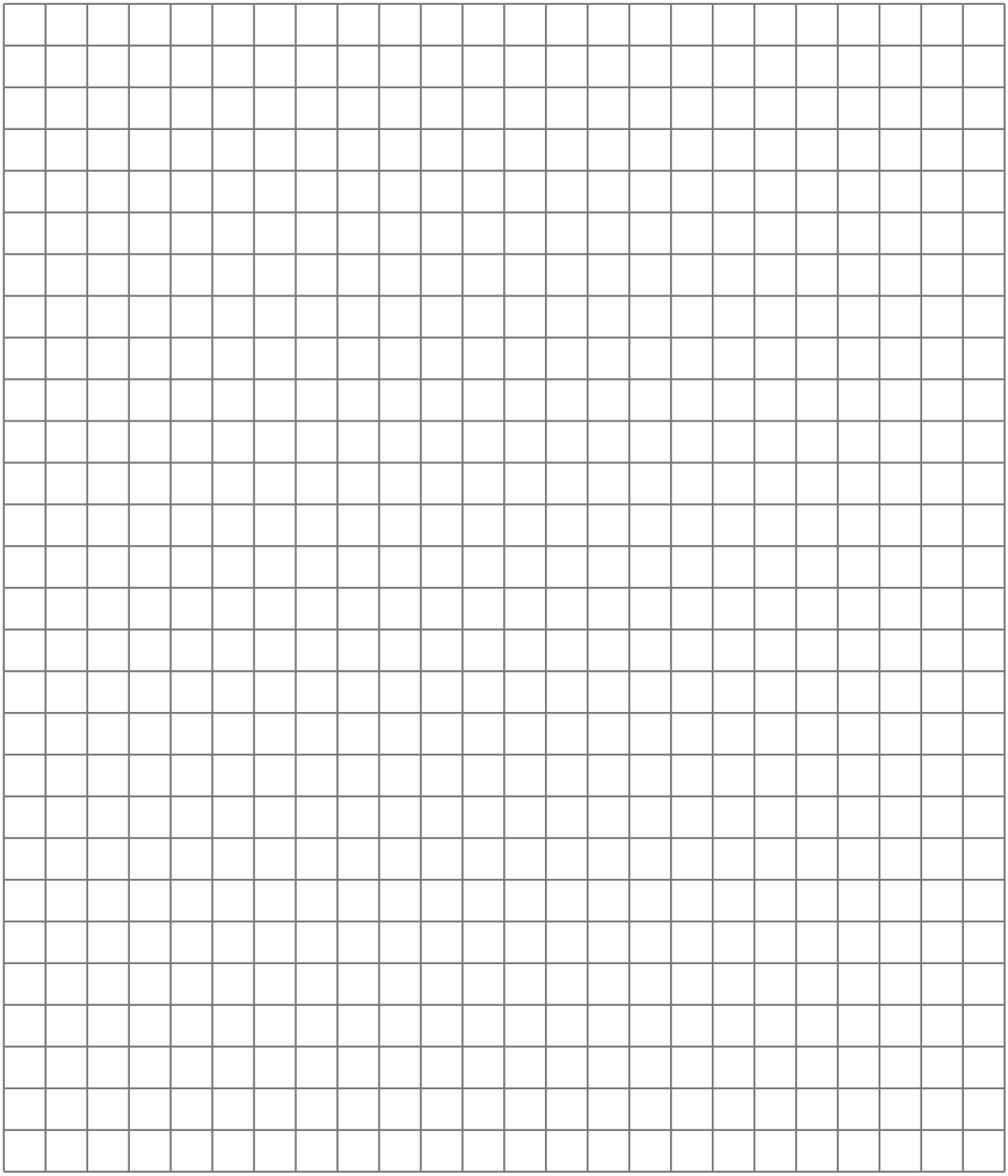
2 Choose one city site that you saw on your road trip that was composed of more than 1 rectangle. Draw the site, then show how to determine the area without counting unit squares.

Show your thinking.

Name _____ Date _____

City Planner

Use the grid paper to create your city.



Investigation 2

Mapping Our Water Footprint

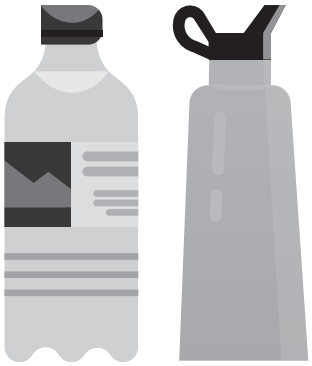
CC1 Represent Multivariable Data | 3.MD.3, 3.NBT.2, SMP.3, SMP.4

Task 1

Name _____ Date _____

Track the Splash

As a class, we are going to collect data and look for ways to reduce our water usage.



1 **Discuss**

What are ways that we use water every day at home and at school?

2 Pick 1 day to keep track of your water usage activities in the *Water Usage* chart.

Task 2

Name _____ Date _____

Graph the Flow

1 Using the *Water Usage* chart from Task 1, create a new *Group Water Usage* chart to tally your group's total usage. Then create a scaled picture or bar graph to collect your group's daily water usage data.

2 What scale did your group choose for your graph? Why?

3 How many times did your group wash their hands in a day? How did you determine the total?

Task 2

Name _____ Date _____

Graph the Flow (continued)

4 What is the difference between the activity done the most and the activity done the least?

Show your thinking.

answer: _____

5 How many water-related activities occurred in total for your group today?

Show or explain your thinking.

answer: _____

Task 3

Name _____ Date _____

Dive Into Data

Create a scaled bar graph or picture graph to collect whole class data on water usage.

1. Total each group's water usage data onto your *Class Water Usage* chart.

2. Create a scaled picture or bar graph to represent the class's water usage data. Use the graph that is different from the graph you used for Task 2.

3. **Data Talk!** How is your small group's data different from the class's data? How is it similar?

4. What scale did you choose for your graph? Justify your answer.

Task 3

Name _____ Date _____

Dive Into Data (continued)

5 What is the difference between the activity with the most water usage in the class and the activity with the least water usage?

Show your thinking.

answer: _____

6 How do you think the graph would change if it were by amount of water instead of number of uses? Why?

Name _____ Date _____

Water Usage

Water Usage	
Activity	**Number of times**
washing your hands	
drinking water (cup or bottle)	
brushing your teeth	
taking a bath or shower	
washing the dishes	
doing laundry	

Name _____ Date _____

Water Usage Sample

Water Usage	
Activity	**Number of times**
washing your hands	𝍸 𝍸
drinking water (cup or bottle)	𝍸 |
brushing your teeth	𝍸
taking a bath or shower	𝍸
washing the dishes	𝍸
doing laundry	|

Name _____ Date _____

Group Water Usage

Group Water Usage	
Activity	**Number of times**
washing your hands	
drinking water (cup or bottle)	
brushing your teeth	
taking a bath or shower	
washing the dishes	
doing laundry	

Name _____ Date _____

Graph the Flow

Create a scaled picture graph to collect group data about daily water usage.

Each _____ represents _____

Name _____ Date _____

Graph the Flow

Create a scaled bar graph to collect group data about daily water usage.

The scale equals: _____

Name _____ Date _____

Class Water Usage

Class Water Usage		
Activity	**Number of times**	**total**
washing your hands		
drinking water (cup or bottle)		
brushing your teeth		
taking a bath or shower		
washing the dishes		
doing laundry		

Name _____ Date _____

Dive into Data

Create a scaled picture graph to collect class data about daily water usage.

Each _____ represents _____.

Name _____ Date _____

Dive into Data

Create a scaled bar graph to collect class data about daily water usage.

The scale equals: _____