

Unit 4

Numbers to 99

Essential Questions

- How can we add and subtract tens?
- How can we represent and compare numbers to 99?



Unit Story: The Collectors

You can read the Unit Story with your student by visiting the Unit Story page on the Caregiver Hub.



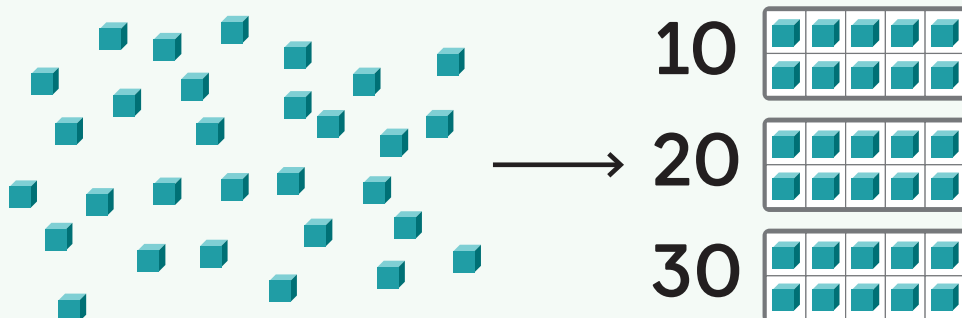
Unit Investigation

Lesson 1 is the Unit Investigation. Students explore different ways to organize and count points when playing a fluency game to build curiosity and apply their own knowledge in a variety of ways. Use the **Caregiver Connection** to help students continue to explore the math they will see in the unit.

Caregiver Connection

Students may enjoy playing games at home and sharing ideas about how to keep track of and count each player's points. Encourage students to record the points using their plan and find the total amount of points each player has after each round.

Counting by 10 is helpful when there are a lot of objects because you do not have to say every number as you count.



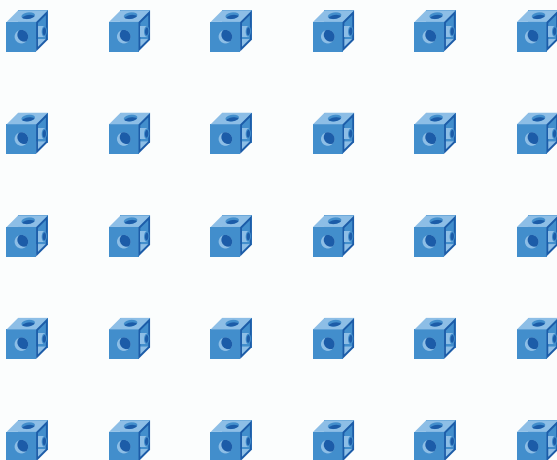
Try This

- 1 Fill in the number pattern.

10, 20, 30, _____, _____, _____, _____, _____

- 2 Circle groups of 10.

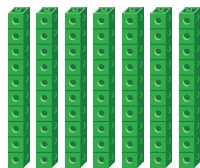
Find the total number of cubes.



Summary | Lesson 3

The numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 can be represented in different ways using objects, pictures, numbers, and words.

70



7 tens

Try This

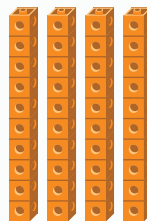
For Problems 1–5, draw a line to match the number with the correct representation.

1

Number

70

Representation



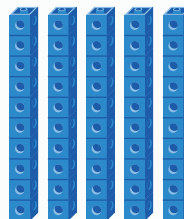
2

50

7 tens

3

40



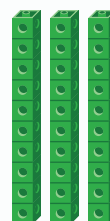
4

30

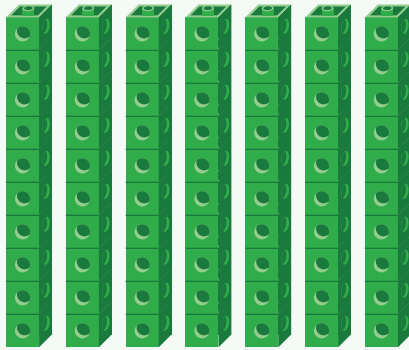
9 tens

5

90



To add or subtract a ten, you can count forward or backward by 10 from the starting number. You can also think about how the number of tens changes.



Start with 70. Add a ten.
70, 80

Start with 70. Subtract a ten.
7 tens take away 1 ten is 6 tens.
6 tens is 60.

Try This

- 1 Diego has 5 towers of 10 cubes.
He gets 1 more tower of 10 cubes from a friend.
How many cubes does Diego have now?

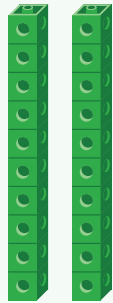


Show your thinking.

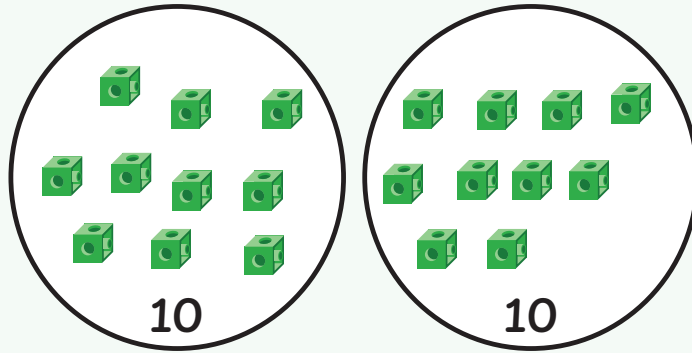
answer: _____

When adding and subtracting tens, sometimes the numbers are already represented in tens. Sometimes, you need to find the number of tens.

2 towers of
10 cubes



20 cubes



4 tens = 40 cubes

Try This

Solve the problem using any strategy. Record your answer with a label.

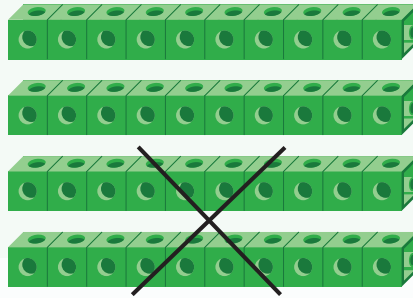
 **Show your thinking.**

- 1 There are 7 towers of 10 cubes on the table. Shawn takes away 2 towers of 10 cubes. How many cubes are on the table now?

answer: _____

You can use different strategies to add and subtract tens. The sums and differences can be represented with equations.

4 tens take away 2 tens is 2 tens



$$40 - 20 = \underline{20}$$

Try This

Solve the problem and write an equation to show how you solved it. Use an underline to show the answer in the equation.

 Show your thinking.

- 1 Clare has 40 marbles.
Priya gives her 40 more.
How many marbles does Clare have now?

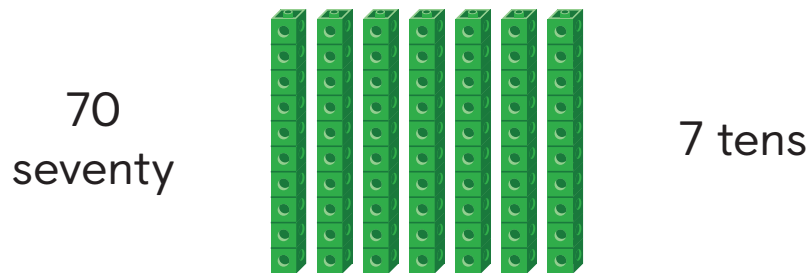
answer: _____

equation: _____

Sub-Unit 1 | Summary

In this sub-unit . . .

- We explored different representations of the same number of tens.



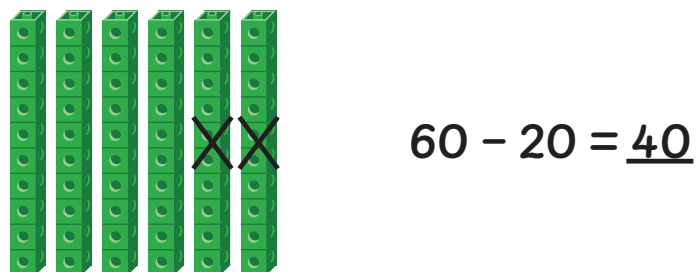
- We added 10 to a number of tens. We subtracted 10 from a number of tens.

$$60 + 10 = \underline{70}$$

$$60 - 10 = \underline{50}$$

🔥 **Math tip:** When adding or subtracting 10, you can skip count forward or backward by 10.

- We found sums of tens and differences between tens.



You can count collections of objects by organizing them into groups of 10 and any remaining ones. You can count by 10 and then count on by 1 to find the total.



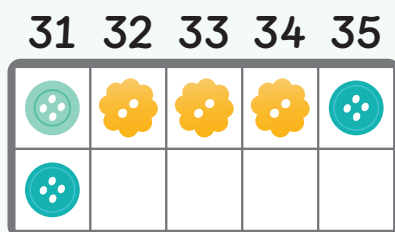
10



20



30

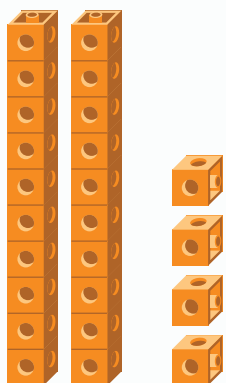


36

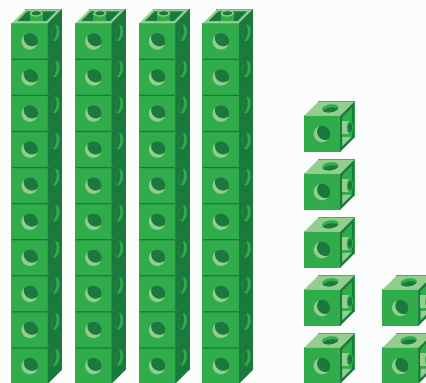
Try This

For Problems 1 and 2, find the number of cubes.

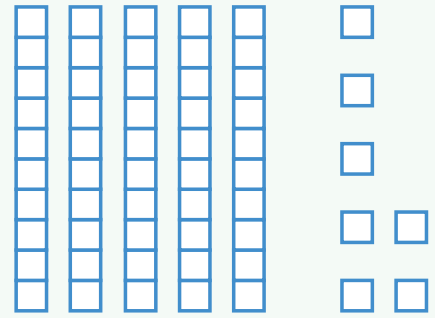
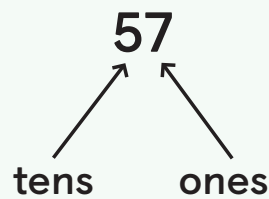
1



2



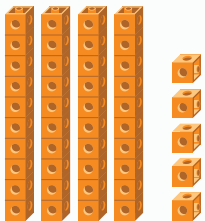
Numbers are written with **digits**. In *two-digit numbers*, the left digit represents the amount of tens and the right digit represents the amount of ones.



Try This

For Problems 1–3, record the amount of tens and ones. Then draw a line to match the representation with the correct number.

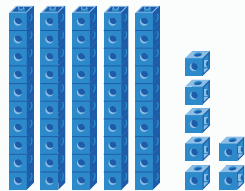
1



_____ tens _____ ones

54

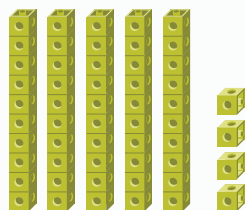
2



_____ tens _____ ones

45

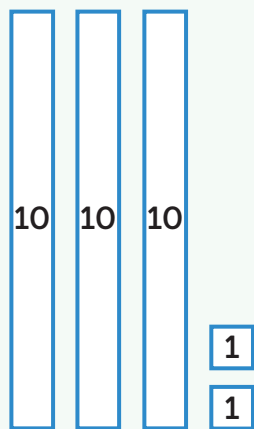
3



_____ tens _____ ones

57

A two-digit number can be represented in different ways that show the number of tens and ones.



32

$$2 + 30$$

3 tens 2 ones

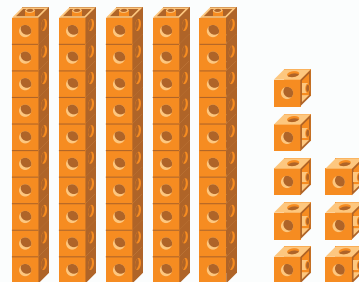
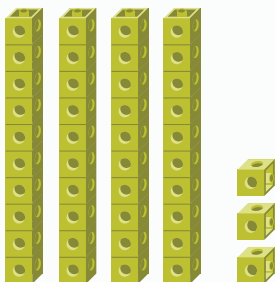
Try This

For Problems 1–5, draw lines to match representations that show the same number.

1 $4 + 20$

$30 + 4$

2



3

4 ones 3 tens

2 tens 4 ones

4

$8 + 50$

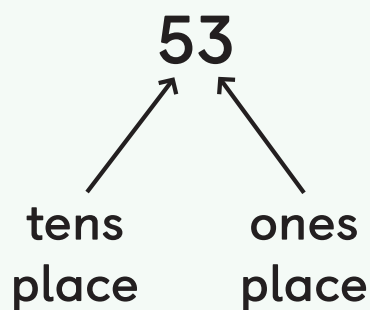
$5 + 60$

5

65

$40 + 3$

Two-digit numbers show tens and ones. The digit in the *tens place* shows the amount of tens. The digit in the *ones place* shows the amount of remaining ones.

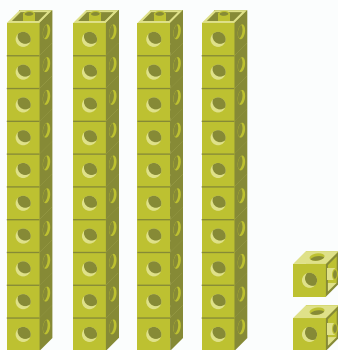


I can look at the order of the digits to know that 53 has 5 tens and 3 ones.

Try This

For Problems 1–4, write the number that matches the representation.

1



2

9 ones 3 tens

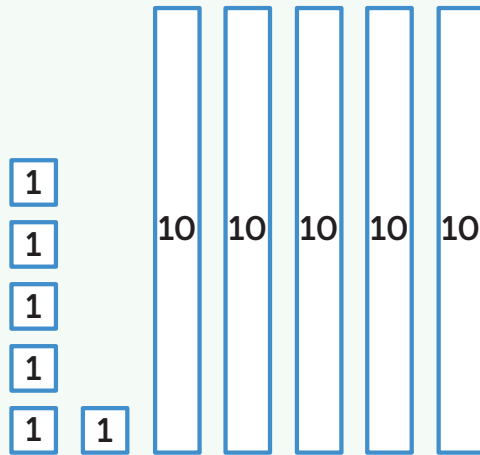
3

$60 + 1$

4

$6 + 10$

When writing two-digit numbers, write a digit in the tens place that represents the number of tens and a digit in the ones place that represents the number of ones.



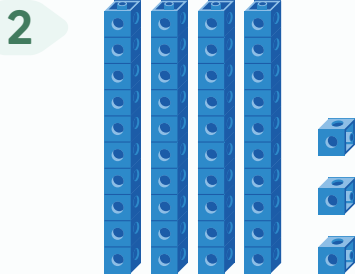
I see 5 tens. I see 6 ones.

56

Try This

For Problems 1–4, write the two-digit number that matches the representation.

1 3 tens 4 ones



3 6 tens

4 6 + 50

There is more than 1 way to find the sum of a number of tens and a two-digit number.

$$50 + 23$$

Count on from either addend.

Use what you know about the values of the digits.

50, 60, 70, 71, 72, 73

23, 33, 43, 53, 63, 73

5 tens and 2 tens is 7 tens.
7 tens and 3 ones is 73.

Try This

- 1 Solve the problem and write an equation to show how you solved it. Use an underline to show the answer in the equation.

Jada has 54 stamps in her collection.

How many stamps will she have if she gets 20 more?



Show your thinking.

answer: _____

equation: _____

When finding 10 more or 10 less than a two-digit number, the digit in the tens place changes. The digit in the ones place does not change.

$$\underline{5}8 + 10 = \underline{6}8$$

$$\underline{4}7 - 10 = \underline{3}7$$

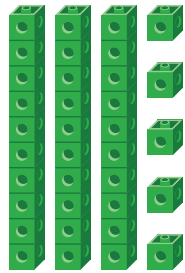
Try This

For Problems 1–6, find 10 more and 10 less than the starting number.

	10 less	Starting number	10 more
1		57	
2		82	
3		27	
4		36	
5		20	
6		79	

In this sub-unit . . .

- We explored different ways to represent two-digit numbers.

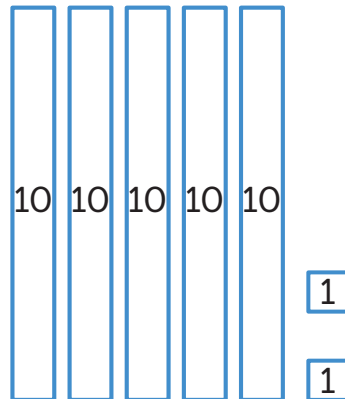


35

$$5 + 30$$

3 tens 5 ones

- We wrote two-digit numbers to match different representations of tens and ones.



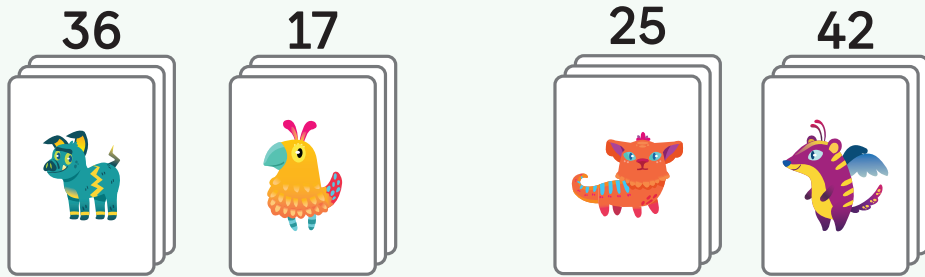
52

 **Math tip:** The digit in the tens place shows the number of tens, and the digit in the ones place shows the number of remaining ones.

- We explored different ways to find the sum of a number of tens and a two-digit number.

$$40 + 36 = \underline{76}$$

When comparing 2 two-digit numbers, you can use **greater than** and **less than** to describe the comparisons.



36 is *greater than* 17. 25 is *less than* 42.

Try This

For Problems 1–4, circle the number that is *greater*.

1

15

32

2

48

57

3

87

70

4

34

43

When comparing two-digit numbers, start with the digits in the tens place. If the digits in the tens place are the same, compare the digits in the ones place.

Both numbers have 3 tens, so the ones need to be compared.

33 **37**

3 ones is *less than* 7 ones, so 33 is *less than* 37.

Try This

For Problems 1–3, compare the numbers. Fill in the sentence with the numbers to make a true statement.

1

15

43

_____ is *greater than* _____.

2

57

75

_____ is *greater than* _____.

3

30

13

_____ is *less than* _____.

The greater than and less than symbols have different meanings. They are used to record comparison statements about 2 numbers.

$>$
greater than

$<$
less than

$80 > 34$
80 is greater than 34.

$51 < 95$
51 is less than 95.

Try This

For Problems 1–3, draw a line to match the symbol with the correct meaning.

1

$>$

equal

2

$=$

less than

3

$<$

greater than

You can use what you know about symbols and the tens and ones in numbers to make comparison statements true.

$$94 \text{ } \underline{>} \text{ } 49$$

$$65 \text{ } < \text{ } \boxed{7} 3$$

Try This

For Problems 1–5, compare the numbers. Write $>$, $<$, or $=$ to make the statement true.

1 $45 \text{ } \underline{\hspace{1cm}} \text{ } 54$

2 $34 \text{ } \underline{\hspace{1cm}} \text{ } 25$

3 $61 \text{ } \underline{\hspace{1cm}} \text{ } 16$

4 $74 \text{ } \underline{\hspace{1cm}} \text{ } 74$

5 $95 \text{ } \underline{\hspace{1cm}} \text{ } 56$

You can write 2 different true comparison statements to show the relationship between 2 numbers.

$$35 > 26$$

$$26 < 35$$

35 is greater than 26.

26 is less than 35.

Try This

For Problems 1–5, write 2 comparison statements using the given numbers and the $>$ and $<$ symbols.

	Numbers		$>$	$<$
1	65	67		
2	36	63		
3	73	28		
4	80	78		
5	26	62		

Summary

Lesson 19

To place a number in an ordered list, you can think about which number it is greater than and which number it is less than.

6, , 34, 36 , 50, 87

36 belongs between 34 and 50 because 36 is *greater than* 34 and *less than* 50.

Try This

For Problems 1 and 2, order and record the numbers from *least* to *greatest*.

1

32

68

45

8

least

greatest

2

45

54

24

52

least

greatest

In this sub-unit . . .

- We thought about the values of digits to compare numbers using the language **greater than** and **less than**.

52 is greater than 25.

25 is less than 52.

-
- We used symbols to record our comparisons.

$$35 > 26$$

35 is **greater than** 26.

$$26 < 35$$

26 is **less than** 35.

$$26 = 26$$

26 is **equal** to 26.

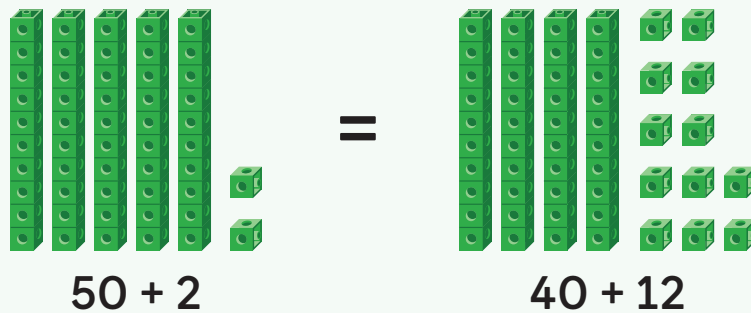
 **Math tip:** Comparison statements are read from left to right. The greater than symbol $>$ has the wide part on the left. The less than symbol $<$ has the point on the left.

-
- We put one-digit and two-digit numbers in order from least to greatest and greatest to least.

least to greatest: 6, 34, 45, 48

greatest to least: 82, 80, 62, 17

Two-digit numbers can be represented with different numbers of tens and ones. One or more of the tens can be broken apart into ones.



Try This

- 1 Use drawings or words to show 2 ways to represent the number 35.
Write an expression for each representation.

 Show your thinking.

Representation 1

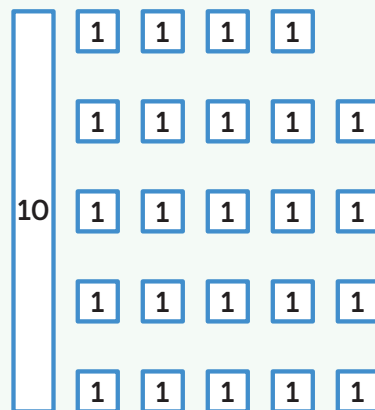
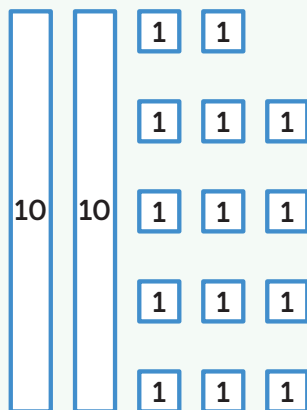
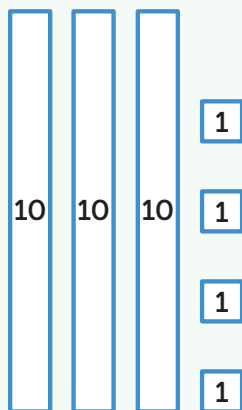
expression:

Representation 2

expression:

Two-digit numbers can be represented as a number of tens and ones in more than 1 way.

34



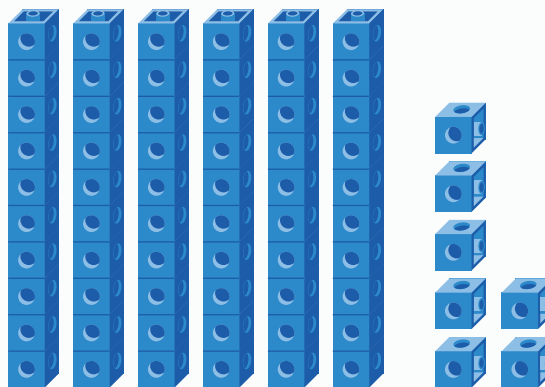
Try This

- Fill in the blanks so that all 3 expressions represent the number of cubes.

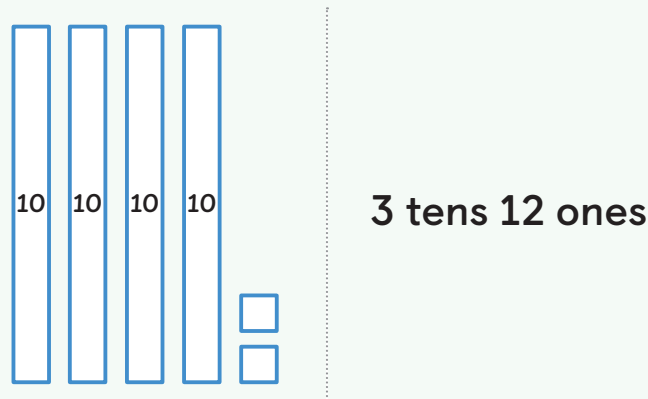
6 tens + _____ ones

4 tens + _____ ones

_____ tens + 37 ones



You can compare two-digit numbers represented as numbers of tens and ones in different ways by comparing the total value of each number or by comparing the tens and ones.



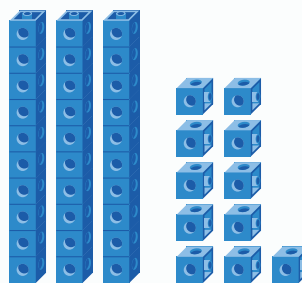
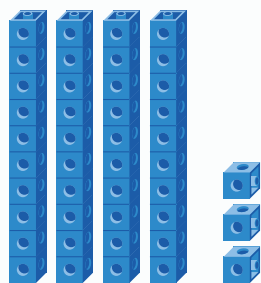
Each has 4 tens and 2 ones.

$$42 = 42$$

Try This

For Problems 1 and 2, compare the numbers shown in the representation. Record a true comparison statement using the $>$, $<$, or $=$ symbol.

1



answer: _____

2

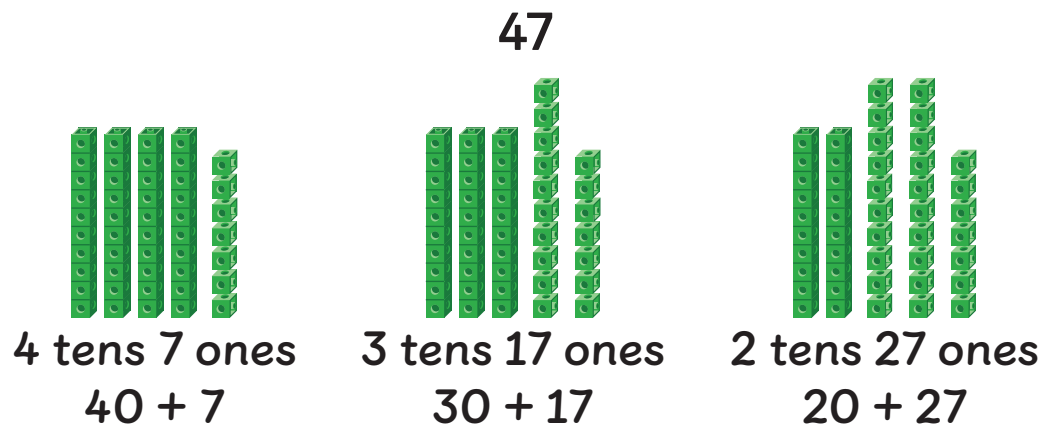
5 tens 18 ones

40 + 28

answer: _____

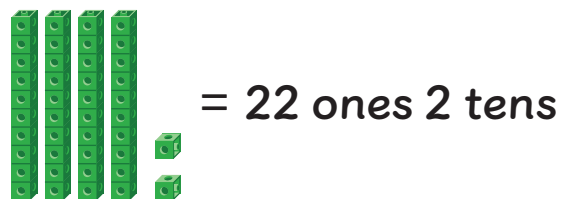
In this sub-unit . . .

- We represented the same two-digit number with different numbers of tens and ones and we noticed patterns in the representations.



 **Math tip:** The digit in the tens place shows how many total tens are in a number, including any groups of 10 ones.

- We compared two-digit numbers that were represented with different numbers of tens and ones.



Both representations show 42.

Try This | Answer Key

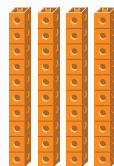
Lesson 2

1 40, 50, 60, 70, 80

2 30

Lesson 3

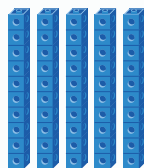
1 70



2 50

7 tens

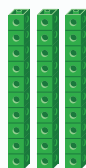
3 40



4 30

9 tens

5 90

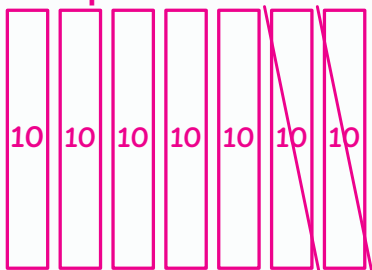


Lesson 4

1 Sample work shown.
 $5 + 1 = 6$
6 tens is 60.
answer: 60 cubes

Lesson 5

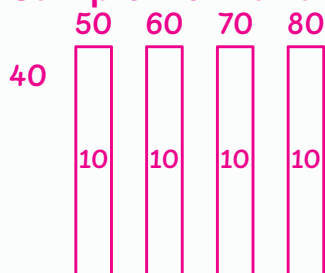
1 Sample work shown.



answer: 50 cubes

Lesson 6

1 Sample work and equation shown.



answer: **80 marbles**

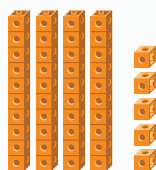
equation: $40 + 40 = \underline{80}$

Lesson 7

1 **24** 2 **47**

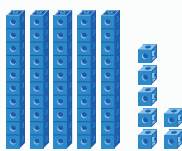
Lesson 8

1



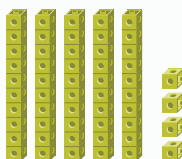
4 tens 5 ones

2



5 tens 7 ones

3



5 tens 4 ones

54

45

57

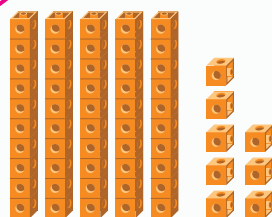
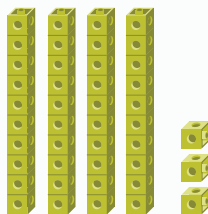
Lesson 9

1

$4 + 20$

$30 + 4$

2



3

4 ones 3 tens

2 tens 4 ones

4

$8 + 50$

$5 + 60$

5

65

$40 + 3$

Lesson 10

1

42

2

39

3

61

4

16

Lesson 11

1

34

2

43

3

60

4

56

Lesson 12

1

Sample work and equation shown.

54, 64, 74

answer: 74 stamps

equation: $54 + 20 = \underline{74}$

Lesson 13

	10 less	Starting number	10 more
1	47	57	67
2	72	82	92
3	17	27	37
4	26	36	46
5	10	20	30
6	69	79	89

Lesson 14

1 32 2 57 3 87 4 43

Lesson 15

1 43 is greater than 15.

2 75 is greater than 57.

3 13 is less than 30.

Lesson 16

1 > equal

2 = less than

3 < greater than

Lesson 17

1 <

2 >

3 >

4 =

5 >

Lesson 18

	Numbers		>	<
1	65	67	$67 > 65$	$65 < 67$
2	36	63	$63 > 36$	$36 < 63$
3	73	28	$73 > 28$	$28 < 73$
4	80	78	$80 > 78$	$78 < 80$
5	26	62	$62 > 26$	$26 < 62$

Lesson 19

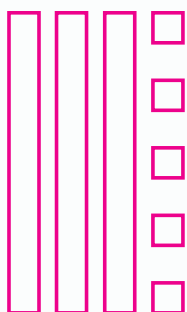
1 8, 32, 45, 68

2 24, 45, 52, 54

Lesson 20

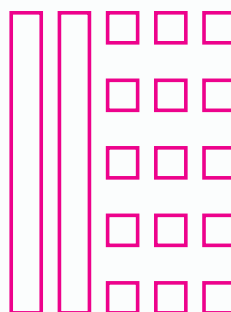
Sample work and expressions shown.

1 Representation 1



expression: $30 + 5$

Representation 2



expression: $20 + 15$

Lesson 21

- 1 6 tens + 7 ones
4 tens + 27 ones
3 tens + 37 ones

Lesson 22

- 1 $43 > 41$ or $41 < 43$ 2 $68 = 68$