

Mathematical Background

Here is an overview of the content your students will learn in this unit.

Adding, Subtracting, and Rounding Larger Numbers

Applying a Variety of Strategies to Fluently Add and Subtract Within 1,000 TEKS 3.4.A

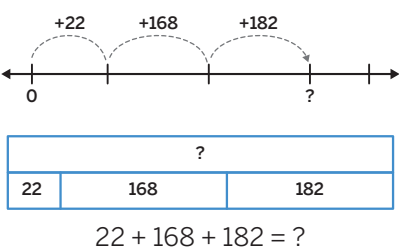
- Sums or differences can be determined by decomposing numbers by place value and adding or subtracting each place.
 - Understanding properties of operations and the relationship between addition and subtraction can be a useful strategy to add and subtract.
- Adding by place:

$$436 + 192$$
$$400 + 30 + 6$$
$$100 + 90 + 2$$
$$436 + 192 = 638$$
- Properties of operations:

$$349 - 124$$
$$349 + 1 = 350 \quad 124 + 1 = 125$$
$$350 - 125 = 225$$

Representing and Solving Two-Step Addition and Subtraction Problems TEKS 3.5.A

- Two-step problems can be represented using strip diagrams, number lines, and equations.
 - Representing helps to make sense of the problem before solving for the unknown value.
- A frozen yogurt shop sold 182 cones on Saturday, 168 on Sunday, and 22 on Monday. How many cones did they sell in all?

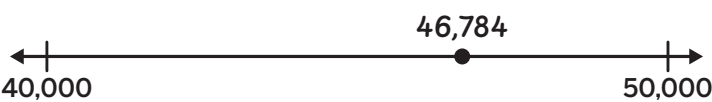


Understanding Mathematical Relationships in the Base-Ten Place Value System TEKS 3.2.A

- Objects, models, and equations can be used to describe the value of each digit in a multi-digit number up to 100,000.
 - Expanded notation** decomposes a number by place and represents the value of each place using multiplication.
- Expanded notation:
- $$396,402 = (3 \times 100,000) + (9 \times 10,000) + (6 \times 1,000) + (4 \times 100) + (2 \times 1).$$

Applying Place Value Understanding to Reason About the Relative Size of Numbers TEKS 3.4.B

- Number lines can be used to reason about the relative size of a number.
 - Apply place value understanding to place a number between 2 consecutive tens, hundreds, thousands, or ten thousands.



Unit Investigation

Lesson 1 is the Unit Investigation. Students represent the number 999 in multiple ways 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 representing three-digit numbers they see at home or in their community. You can ask:

- “How many hundreds, tens, and ones are in this number?”
- “How else could you represent this number?”
- “How would you round this number to the nearest ten? The nearest hundred?”