

#### Objective

Compute the sum of three numbers.

#### Common Core State Standards

1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

#### **Operations and Algebraic Thinking**

## **Adding Three Numbers**

In addition, the numbers being combined are addends, and the total is the sum. When adding more than two numbers, the numbers can be added in any order (5 + 6 + 2 = 13 or 2 + 5 + 6 = 13) or grouped in any way ((5 + 6) + 2 = 13) or 5 + (6 + 2) = 13). Working with this skill also reinforces the concept of making fives and tens. It is this type of strategy that helps children to develop not only their number sense, but also mental math computations.

Try it! Perform the Try It! activity on the next page.

#### Talk About It

Discuss the Try It! activity.

- Have children look at their DecaDots<sup>®</sup> tiles used in the Try It! activity.
- Ask: Which tiles show the T-shirts? Which show the sweatshirts? Which show the dress shirts?
- Ask: How many ten tiles can overlap the other tiles? What does the number of ten tiles represent?
- Ask: How many shirts did Corey pack? How did you know?

#### Solve It

With children, reread the problem. Invite children to draw pictures of Corey's shirts or use symbols to represent them. Next, have children label the picture with a numerical answer and write a sentence explaining the number of shirts Corey packed.

#### **More Ideas**

For other ways to teach about adding three numbers-

- Have children use different color Snap Cubes<sup>®</sup> to represent separate addends, then combine them into one long row, and count to find the sum.
- Have children use counters or Snap Cubes to try adding the same three numbers in different orders to explore the Commutative Property of Addition. Also, Cuisenaire<sup>®</sup> Rods could be used to explore number properties such as commutative and associative.

#### **Formative Assessment**

Have children try the following problem.

Draw pictures to solve this problem, and write a number to show your answer. Mariah is buying bananas. She takes a bunch with 6 bananas, then one with 4 bananas, and then one with 3 bananas. How many bananas did she buy altogether?

#### Try It! 30 minutes | Pairs

Here is a problem for adding three numbers.

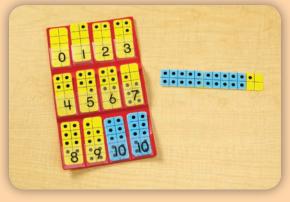
Corey packed 7 T-shirts, 8 sweatshirts, and 6 dress shirts for his trip. How many shirts did he pack in all?

Introduce the story problem. Then have children do the activity to solve the problem.

Say: Let's determine how many shirts Corey packed.



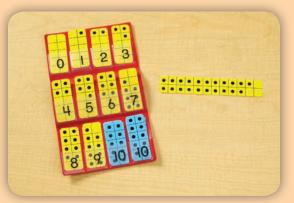
**1.** To begin, have children choose tiles to show the numbers of T-shirts, sweatshirts, and dress shirts Corey packed.



**3.** Finally, have children place a ten tile on top of a group of 10 dots. Repeat if another group of 10 dots exists. **Ask:** How many shirts did Corey pack in all? What number is represented by the DecaDots?

#### Materials

• DecaDots<sup>®</sup> wallet (1 per pair)



**2.** Have children place the tiles in a row so that as many dots are next to each other as possible. You may overlap part of a tile with another.

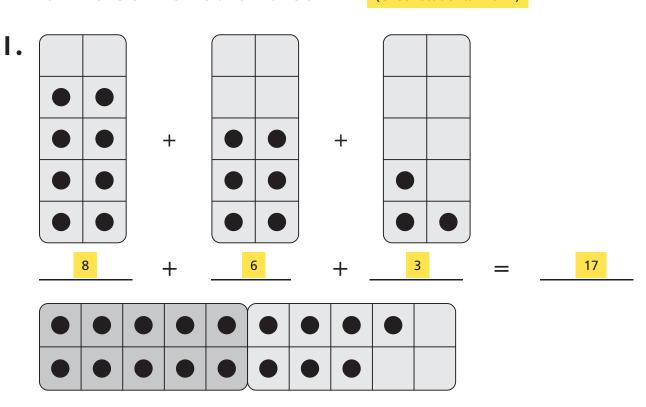
🛦 Look Out!

Watch for children who do not know where to begin when adding three numbers. Remind children to add two numbers first and then add the third number.



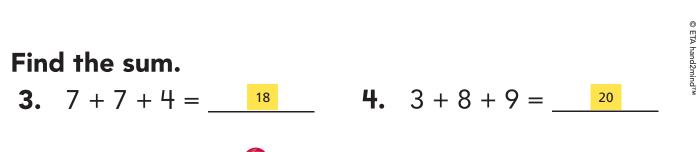


### Use DecaDots. Add the numbers modeled. Write the sentence and sum. (Check students' work.)



# Use DecaDots. Model the addition. Draw the model. Write the sum.

**2.** 
$$6 + 8 + 5 = 19$$

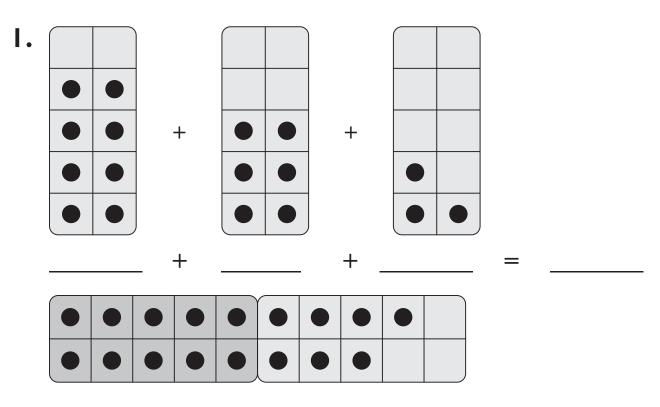


#### **Answer Key**

**Challenge!** Find three numbers that add to 16. Write a number sentence for these numbers.

Challenge: (Sample) 10, 4, and 2; 10 + 4 + 2 = 16

Use DecaDots. Add the numbers modeled. Write the sentence and sum.



Use DecaDots. Model the addition. Draw the model. Write the sum.

**2.** 6 + 8 + 5 = \_\_\_\_\_

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**Challenge!** Find three numbers that add to 16. Write a number sentence for these numbers.