Unit 8, Lesson 10

Write Expressions and Equations to Represent Arrays

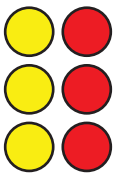
Let's write equations to represent arrays.

Warm-up

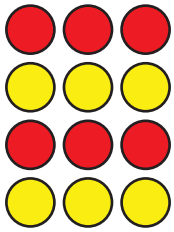
True or False: Expressions That Represent Arrays

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $2 + 2 + 2 = 3 + 3$



- $4 + 4 + 4 = 3 + 3 + 3 + 3$



- $5 + 5 + 5 = 3 + 3 + 3$

Activity 1

Build Arrays and Write Equations

1. Use 20 counters. Make an array with 4 rows.

   a. How many columns does your array have?

   b. Fill in the blanks. Create equations with equal addends to represent the array.

   _____ + _____ + _____ + _____ = _____

   _____ + _____ + _____ + _____ + _____ = _____

2. Use 15 counters. Make an array with 3 columns.

   a. How many rows does your array have?

   b. Fill in the blanks. Create equations with equal addends to represent the array.

   _____ + _____ + _____ + _____ + _____ = _____

   _____ + _____ + _____ = _____

3. Choose an even number of counters between 6 and 24. Make an array.

   a. How many rows does your array have?

   b. How many columns does your array have?

   c. Write equal addends equations to represent the array.

Activity 2

Arrange Veggies to Make Arrays

1. Make an array that shows how to plant 9 potatoes. Draw the array.
   Write an equation to represent it.

2. Make an array that shows how to plant 16 carrot seeds. Draw the array.
   Write an equation to represent it.

3. Make an array that shows how to plant 15 potatoes. Draw the array.
   Write an equation to represent it.

4. Make an array that shows how to plant 12 carrot seeds. Draw the array.
   Write an equation to represent it.