Unit 8, Lesson 9

# A Sum of Equal Addends

Let's match expressions with arrays.

## Warm-up

### Estimation Exploration: How Many Waffles?

How many waffles are on the tray?



Record an estimate that is:

| too low | about right | too high |
|---|---|---|
| | | |

How many waffles are on the tray?



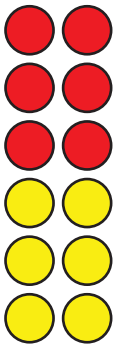
Record an estimate that is:

| too low | about right | too high |
| --- | --- | --- |
| | | |

Activity 1

## Sums of Rows and Sums of Columns

Mai and Diego represent this array. They use different expressions.



Diego's expression

$2 + 2 + 2 + 2 + 2 + 2$

Mai's expression

$6 + 6$

Do you agree with Diego or Mai?

Show your thinking using drawings, numbers, or words.

Activity 2

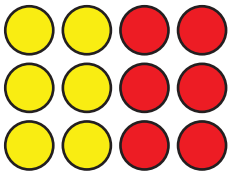
## Card Sort: Arrays and Expressions

Your teacher will give you a set of cards. Match each array card with 2 expression cards and 1 number card. Be ready to explain your reasoning.

Activity 3

## Add It All Up

1. a. How many counters are in the array?



b. Explain how you found the total.

c. Circle **2** expressions that represent the array.

$3 + 3 + 3 + 3$

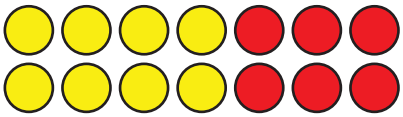
$3 + 3 + 3$

$4 + 3$

$4 + 4 + 4$

$4 + 4 + 4 + 4$

2. a. How many counters are in the array?



b. Explain how you found the total.

c. Circle **2** expressions that represent the array.

$2 + 2 + 2 + 2 + 2 + 2 + 2$

$6 + 6$

$7 + 7$

$2 + 2 + 2 + 2 + 2$