## 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?



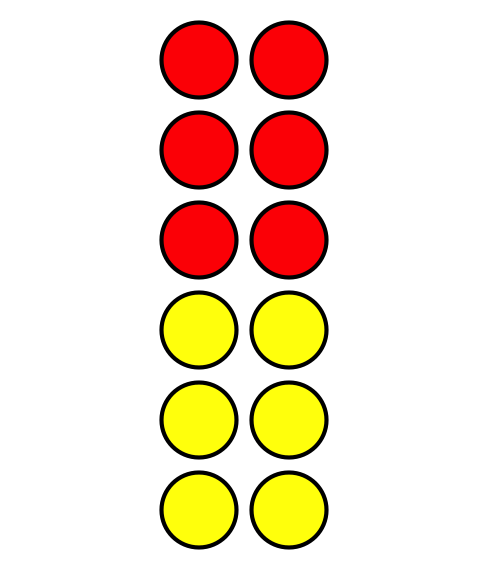


Record an estimate that is:

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

### 9.1: Sums of Rows and Sums of Columns

Mai and Diego represented the same array with different expressions.



Diego’s expression

Mai’s expression

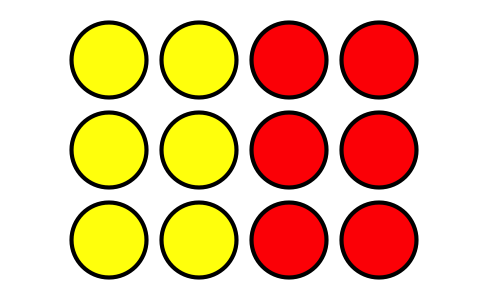
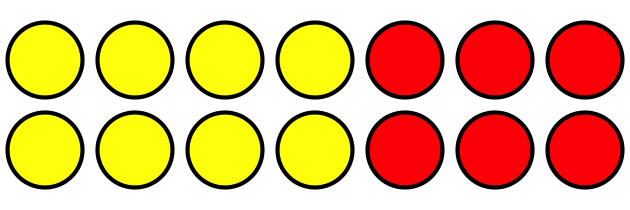
Who do you agree with?

Show your thinking using diagrams, symbols, or other representations.

### 9.2: Card Sort: Arrays and Expressions

Your teacher will give you a set of cards that show arrays, expressions and a total number. Find the cards that match.

### 9.3: Add It All Up

* 1. How many counters are there in all?
  + 
  1. Explain how you found the total number of counters.
  2. Circle **2** expressions that represent the array.
  3. How many counters are there in all?
  + 
  1. Explain how you found the total number of counters.
  2. Circle **2** expressions that represent the array.



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