Grade: 2nd **Topic:** Arrays

Key Vocabulary:

addition: the act of joining quantities to get a sum or total

array: a set of objects arranged in columns and rows

column: a set of objects arranged vertically

row: a set of objects arranged horizontally

addend: a number that is added

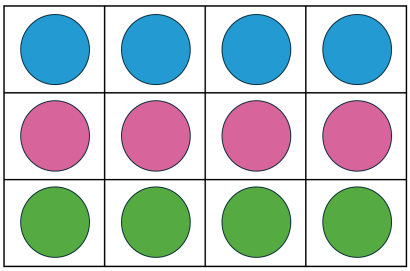
sum: the result of adding numbers together

repeated addition: using the same number multiple times to match the columns and rows in a rectangle

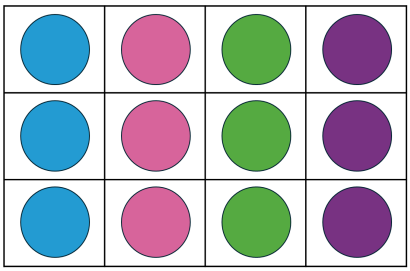
commutative property: numbers can be added in any order, even when decomposed

Key Ideas:

Students will use addition to find the total number of objects contained in rectangular arrays with up to 5 rows and up to 5 columns, representing the total with a repeated addition equation using equal addends.

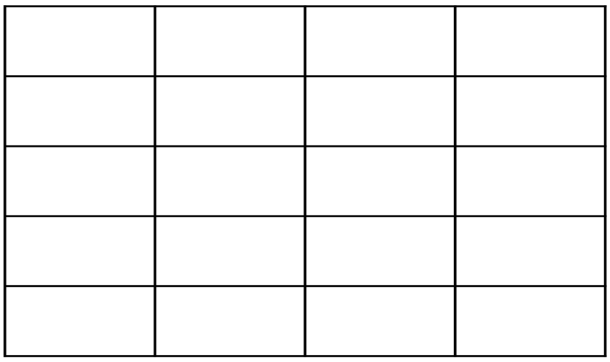


$4 + 4 + 4 = 12$



$3 + 3 + 3 + 3 = 12$

*Because of the commutative property of addition, students can add the number of objects/squares in each row or the number of objects/squares in each column to arrive at the same total.

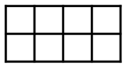


$4 + 4 + 4 + 4 + 4 = 20$

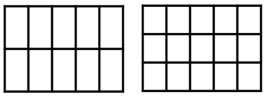
$5 + 5 + 5 + 5 = 20$

Sample Problems:

Write a repeated addition equation to show the total number of squares in this rectangle.



Which of the following rectangles match the repeated addition equation below?:
5+5+5=15



Malik used grid paper to make a rectangle with 4 rows and 4 columns. Write an equation to show the total number of squares.