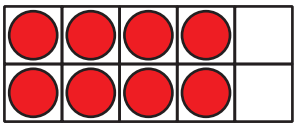
Lesson 11: Arrays and Rectangles

- Let's make arrays and rectangles using tiles.

Warm-up: Which One Doesn't Belong: All Kinds of Arrays

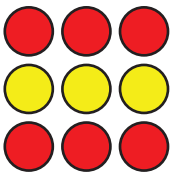
Which one doesn't belong?

A

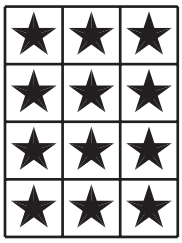


B

C



D



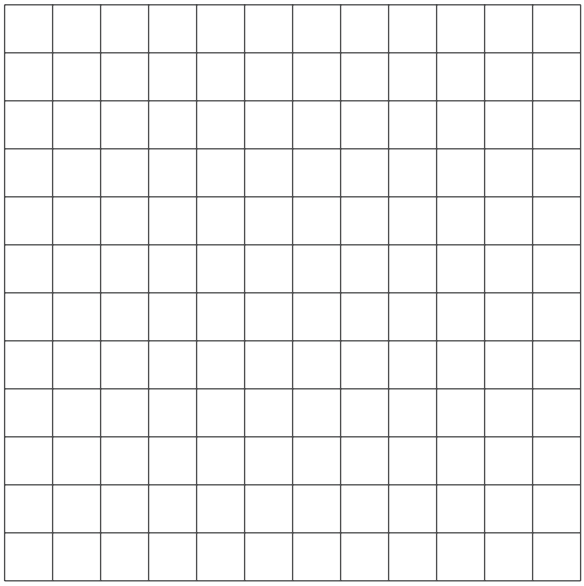
11.1: Use Tiles to Make Arrays

Choose a number of tiles.

12 15 16 18 20

Arrange all the tiles in an array. Then push them together to make a rectangle.

1. Shade in the same arrangement of squares on the grid paper.



2. How many rows of squares does your rectangle have? _____

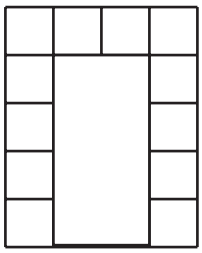
3. How many columns does your rectangle have? _____

4. How many tiles are in your rectangle? _____

5. Write 2 equations to represent the number of squares in your rectangle.

11.2: Make Equal-size Squares

1. a. Draw lines so that the rectangle is completely filled with equal-size squares.



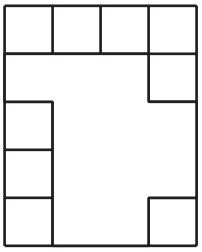
b. Color the rows different colors.

c. How many rows of equal-size squares are there?

d. How many squares are in each row?

e. Write an equation to represent the sum of the squares in each row.

2. a. Draw lines so that the rectangle is completely filled with equal-size squares.



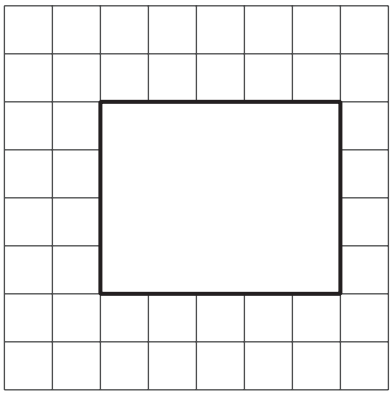
b. Color the columns different colors.

c. How many columns of equal-size squares are there?

d. How many squares are in each column?

e. Write an equation that represents the sum of squares in each column.

3. a. Draw lines so that the rectangle is completely filled with equal-size squares.



b. How many columns of equal-size squares are there? How many squares are in each column?

c. How many rows of equal-size squares are there? How many squares are in each row?

d. Write 2 equations to represent the number of equal-size squares in the rectangle.