Unit 1, Lesson 2

Factor Pairs

Let's learn about factor pairs.

Warm-up

Number Talk: Multiplication

Find the value of each expression mentally.

- 2×7
- 4×7
- 3×7
- 7×7

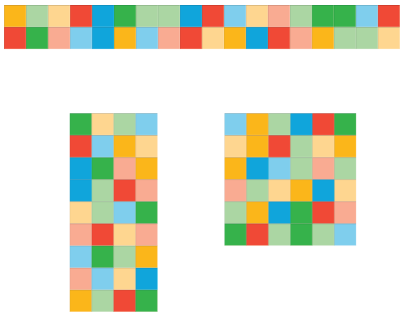
Activity 1

How Many Rectangles?

Your teacher will assign 2 numbers to your group. Each number represents the area of a rectangle.

1. On grid paper:
    - Draw all the possible rectangles that have the given area.
    - Label the area and side lengths of each rectangle.
    - Use only whole numbers for side lengths.
    - Use each pair of side lengths only once.

      (For example, if you draw a rectangle with 4 units across and 6 units down, you don't need to also draw a rectangle with 6 units across and 4 units down because they have the same pair of side lengths.)
2. When you think you've drawn all the possible rectangles for both areas, cut out your rectangles and put them on a poster. Make 1 poster for each area you were assigned.
3. Display your poster for all to see.



Activity 2

Gallery Walk: How Many Rectangles?

As you visit each poster, discuss with your partner:

1. What do you notice? Use the following sentence frames when you share:
   a. "I notice that some of the posters . . . ."
   b. "I notice the posters for areas _____ and _____ are alike because . . . ."

2. How do you know that all possible rectangles were found for the given area?