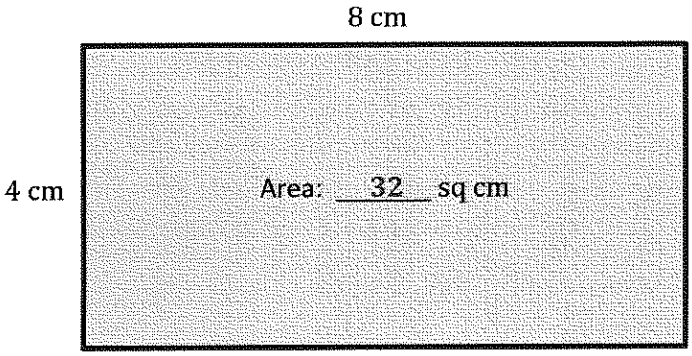
G3-M4-Lesson 8

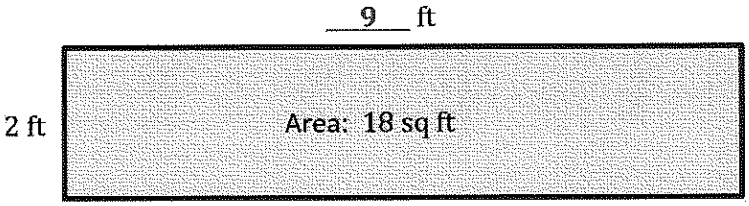
1. Write a multiplication equation to find the area of the rectangle.



I know that I can multiply the side lengths, 4 and 8, to find the area.

4 × 8 = 32

2. Write a multiplication equation and a division equation to find the unknown side length for the rectangle.

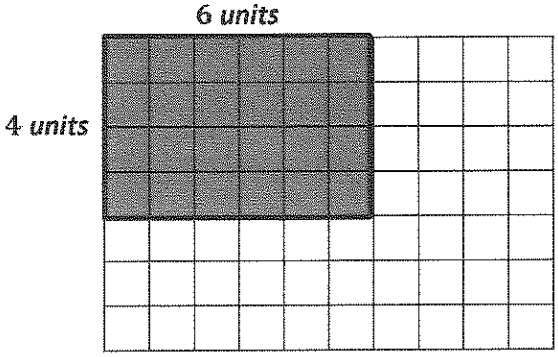


To solve, I can think of this as multiplication with an unknown factor, 2 × ____ = 18. Or, I can divide the area by the known side length, 18 ÷ 2 = ____. Either way, the answer is 9.

2 × 9 = 18

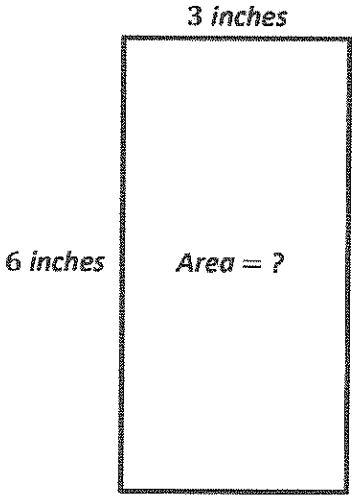
18 ÷ 2 = 9

3. On the grid below, draw a rectangle that has an area of 24 square units. Label the side lengths.



To draw a rectangle with an area of 24 square units, I can think about factors of 24. I know 4 × 6 = 24, so my side lengths can be 4 and 6.

4. Keith draws a rectangle that has side lengths of 6 inches and 3 inches. What is the area of the rectangle? Explain how you found your answer.



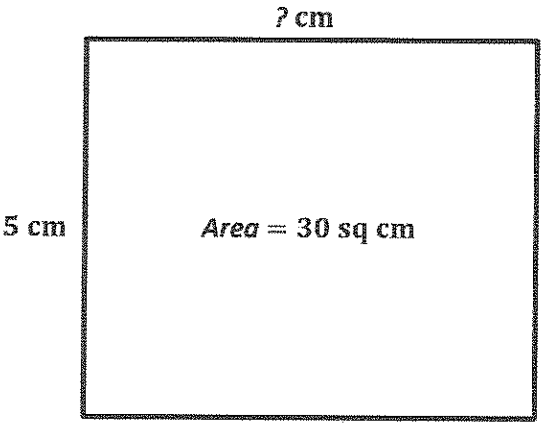
I can draw and label an area model to help me solve.

$6 \times 3 = 18$

I can multiply the side lengths to find the area.

The area of the rectangle is 18 square inches. I multiplied the side lengths, 6 inches and 3 inches, to find the answer.

5. Isabelle draws a rectangle with a side length of 5 centimeters and an area of 30 square centimeters. What is the other side length? How do you know?



This is different than Problem 4 because the unknown is one of the side lengths.

$30 \div 5 = 6$

When I know the area and one side length, I can divide to find the other side length. Or, I can think of this as an unknown factor problem: $5 \times \_\_\_\_ = 30$.

The other side length is 6 centimeters. I divided the area, 30 square centimeters, by the known side length, 5 centimeters, and $30 \div 5 = 6$.