

Grade 3 • Unit 2 Worksheet

Area and Multiplication

Name: _____

Date: _____

Part A • What Is Area?

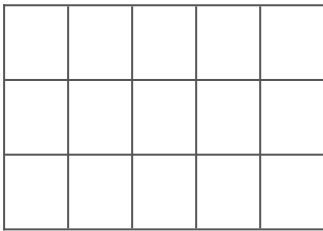
1. Below is a rectangle drawn with unit squares.

What is the area? _____ square units

Find the area in TWO different ways. (Don't just count one by one!)

Way 1:

Way 2:



2. Pat says, "This rectangle has an area of 7 squares," and points to a rectangle that has 7 unit squares with gaps between some of them. Is Pat correct? Why or why not?

Part B • Area and Multiplication

3. A rectangle is 6 squares wide and 4 squares tall.

What is the area? _____ square units

Write a multiplication equation that gives the area: _____ $\times$ _____ = _____

How do you see equal groups in this rectangle?

4. A rectangle has side lengths of 7 inches and 3 inches.

What is the area? _____ square inches

Sketch the rectangle and show how you know:

5. Find the area of each rectangle. Show your thinking.

a. 8 cm by 5 cm: area = _____ sq cm

b. 9 ft by 2 ft: area = _____ sq ft

c. 4 m by 4 m: area = _____ sq m

Part C • Choosing Units

6. Which unit would you use to measure each area? Choose square inches, square feet, square centimeters, or square meters.

a. the top of a postage stamp: _____

b. the floor of a gym: _____

c. the cover of a math book: _____

d. a basketball court: _____

7. Two rectangles have the same area: one is 12 square inches, the other is 12 square feet. Are they the same size? Explain.

Part D • Figures Made of Rectangles

8. An L-shaped figure can be split into two rectangles: a 4-by-3 rectangle on top, and a 4-by-6 rectangle below it (the rectangles share a side).

Sketch this figure (a 4×3 rectangle sitting on top of a 4×6 rectangle):

Find the area of the top rectangle: _____ sq units

Find the area of the bottom rectangle: _____ sq units

Total area of the L-shape: _____ sq units

9. Mia found the area of an L-shape by splitting it into two rectangles. Diego found the same area by drawing a big rectangle around the L and subtracting the missing corner. Could they BOTH be right? Why?

Part E • Thinking Deeply

10. Look at this rectangle:

What is the area? _____ sq ft

What would happen to the area if you DOUBLED the 5 to 10? _____ sq ft

Did the area double, triple, or something else? Explain.

8 feet

5 feet



11. Han says the area of a 6-by-3 rectangle is 9 square units, because $6 + 3 = 9$. What's wrong?

12. Draw TWO different rectangles that each have an area of 12 square units. Label the side lengths.

Rectangle 1: _____ by _____

Rectangle 2: _____ by _____

Could a 5-by-3 rectangle have an area of 12? Why or why not?
