A Story of Units®

Eureka Math™

Grade 3, Module 4

Student File_B

Contains Sprint and Fluency, Exit Ticket, and Assessment Materials

Published by the non-profit Great Minds.

Printed in the U.S.A.
This book may be purchased from the publisher at eureka-math.org
10 9 8 7 6 5 4 3 2 1

Sprint and Fluency Packet

Multiply.

4 x 1 = _____	4 x 2 = _____	4 x 3 = _____	4 x 4 = _____
4 x 5 = _____	4 x 6 = _____	4 x 7 = _____	4 x 8 = _____
4 x 9 = _____	4 x 10 = _____	4 x 6 = _____	4 x 7 = _____
4 x 6 = _____	4 x 8 = _____	4 x 6 = _____	4 x 9 = _____
4 x 6 = _____	4 x 10 = _____	4 x 6 = _____	4 x 7 = _____
4 x 6 = _____	4 x 7 = _____	4 x 8 = _____	4 x 7 = _____
4 x 9 = _____	4 x 7 = _____	4 x 10 = _____	4 x 7 = _____
4 x 8 = _____	4 x 6 = _____	4 x 8 = _____	4 x 7 = _____
4 x 8 = _____	4 x 9 = _____	4 x 8 = _____	4 x 10 = _____
4 x 8 = _____	4 x 9 = _____	4 x 6 = _____	4 x 9 = _____
4 x 7 = _____	4 x 9 = _____	4 x 8 = _____	4 x 9 = _____
4 x 10 = _____	4 x 9 = _____	4 x 10 = _____	4 x 6 = _____
4 x 10 = _____	4 x 7 = _____	4 x 10 = _____	4 x 8 = _____
4 x 10 = _____	4 x 9 = _____	4 x 10 = _____	4 x 6 = _____
4 x 8 = _____	4 x 10 = _____	4 x 7 = _____	4 x 9 = _____

multiply by 4 (6–10)

Multiply.

6 x 1 = _____	6 x 2 = _____	6 x 3 = _____	6 x 4 = _____
6 x 5 = _____	6 x 6 = _____	6 x 7 = _____	6 x 8 = _____
6 x 9 = _____	6 x 10 = _____	6 x 5 = _____	6 x 6 = _____
6 x 5 = _____	6 x 7 = _____	6 x 5 = _____	6 x 8 = _____
6 x 5 = _____	6 x 9 = _____	6 x 5 = _____	6 x 10 = _____
6 x 6 = _____	6 x 5 = _____	6 x 6 = _____	6 x 7 = _____
6 x 6 = _____	6 x 8 = _____	6 x 6 = _____	6 x 9 = _____
6 x 6 = _____	6 x 7 = _____	6 x 6 = _____	6 x 7 = _____
6 x 8 = _____	6 x 7 = _____	6 x 9 = _____	6 x 7 = _____
6 x 8 = _____	6 x 6 = _____	6 x 8 = _____	6 x 7 = _____
6 x 8 = _____	6 x 9 = _____	6 x 9 = _____	6 x 6 = _____
6 x 9 = _____	6 x 7 = _____	6 x 9 = _____	6 x 8 = _____
6 x 9 = _____	6 x 8 = _____	6 x 6 = _____	6 x 9 = _____
6 x 7 = _____	6 x 9 = _____	6 x 6 = _____	6 x 8 = _____
6 x 9 = _____	6 x 7 = _____	6 x 6 = _____	6 x 8 = _____

multiply by 6 (6–10)

Multiply.

7 x 1 = _____	7 x 2 = _____	7 x 3 = _____	7 x 4 = _____
7 x 5 = _____	7 x 6 = _____	7 x 7 = _____	7 x 8 = _____
7 x 9 = _____	7 x 10 = _____	7 x 5 = _____	7 x 6 = _____
7 x 5 = _____	7 x 7 = _____	7 x 5 = _____	7 x 8 = _____
7 x 5 = _____	7 x 9 = _____	7 x 5 = _____	7 x 10 = _____
7 x 6 = _____	7 x 5 = _____	7 x 6 = _____	7 x 7 = _____
7 x 6 = _____	7 x 8 = _____	7 x 6 = _____	7 x 9 = _____
7 x 6 = _____	7 x 7 = _____	7 x 6 = _____	7 x 7 = _____
7 x 8 = _____	7 x 7 = _____	7 x 9 = _____	7 x 7 = _____
7 x 8 = _____	7 x 6 = _____	7 x 8 = _____	7 x 7 = _____
7 x 8 = _____	7 x 9 = _____	7 x 9 = _____	7 x 6 = _____
7 x 9 = _____	7 x 7 = _____	7 x 9 = _____	7 x 8 = _____
7 x 9 = _____	7 x 8 = _____	7 x 6 = _____	7 x 9 = _____
7 x 7 = _____	7 x 9 = _____	7 x 6 = _____	7 x 8 = _____
7 x 9 = _____	7 x 7 = _____	7 x 6 = _____	7 x 8 = _____

multiply by 7 (6–10)

Multiply.

8 x 1 = _____	8 x 2 = _____	8 x 3 = _____	8 x 4 = _____
8 x 5 = _____	8 x 6 = _____	8 x 7 = _____	8 x 8 = _____
8 x 9 = _____	8 x 10 = _____	8 x 5 = _____	8 x 6 = _____
8 x 5 = _____	8 x 7 = _____	8 x 5 = _____	8 x 8 = _____
8 x 5 = _____	8 x 9 = _____	8 x 5 = _____	8 x 10 = _____
8 x 6 = _____	8 x 5 = _____	8 x 6 = _____	8 x 7 = _____
8 x 6 = _____	8 x 8 = _____	8 x 6 = _____	8 x 9 = _____
8 x 6 = _____	8 x 7 = _____	8 x 6 = _____	8 x 7 = _____
8 x 8 = _____	8 x 7 = _____	8 x 9 = _____	8 x 7 = _____
8 x 8 = _____	8 x 6 = _____	8 x 8 = _____	8 x 7 = _____
8 x 8 = _____	8 x 9 = _____	8 x 9 = _____	8 x 6 = _____
8 x 9 = _____	8 x 7 = _____	8 x 9 = _____	8 x 8 = _____
8 x 9 = _____	8 x 8 = _____	8 x 6 = _____	8 x 9 = _____
8 x 7 = _____	8 x 9 = _____	8 x 6 = _____	8 x 8 = _____
8 x 9 = _____	8 x 7 = _____	8 x 6 = _____	8 x 8 = _____

multiply by 8 (6–10)

Multiply.

9 x 1 = _____	9 x 2 = _____	9 x 3 = _____	9 x 4 = _____
9 x 5 = _____	9 x 1 = _____	9 x 2 = _____	9 x 1 = _____
9 x 3 = _____	9 x 1 = _____	9 x 4 = _____	9 x 1 = _____
9 x 5 = _____	9 x 1 = _____	9 x 2 = _____	9 x 3 = _____
9 x 2 = _____	9 x 4 = _____	9 x 2 = _____	9 x 5 = _____
9 x 2 = _____	9 x 1 = _____	9 x 2 = _____	9 x 3 = _____
9 x 1 = _____	9 x 3 = _____	9 x 2 = _____	9 x 3 = _____
9 x 4 = _____	9 x 3 = _____	9 x 5 = _____	9 x 3 = _____
9 x 4 = _____	9 x 1 = _____	9 x 4 = _____	9 x 2 = _____
9 x 4 = _____	9 x 3 = _____	9 x 4 = _____	9 x 5 = _____
9 x 4 = _____	9 x 5 = _____	9 x 1 = _____	9 x 5 = _____
9 x 2 = _____	9 x 5 = _____	9 x 3 = _____	9 x 5 = _____
9 x 4 = _____	9 x 2 = _____	9 x 4 = _____	9 x 3 = _____
9 x 5 = _____	9 x 3 = _____	9 x 2 = _____	9 x 4 = _____
9 x 3 = _____	9 x 5 = _____	9 x 2 = _____	9 x 4 = _____

multiply by 9 (1–5)

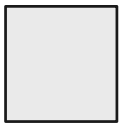
Multiply.

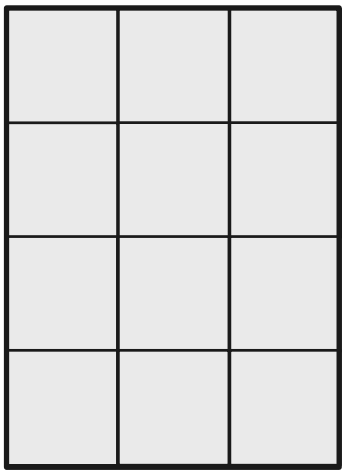
9 x 1 = _____	9 x 2 = _____	9 x 3 = _____	9 x 4 = _____
9 x 5 = _____	9 x 6 = _____	9 x 7 = _____	9 x 8 = _____
9 x 9 = _____	9 x 10 = _____	9 x 5 = _____	9 x 6 = _____
9 x 5 = _____	9 x 7 = _____	9 x 5 = _____	9 x 8 = _____
9 x 5 = _____	9 x 9 = _____	9 x 5 = _____	9 x 10 = _____
9 x 6 = _____	9 x 5 = _____	9 x 6 = _____	9 x 7 = _____
9 x 6 = _____	9 x 8 = _____	9 x 6 = _____	9 x 9 = _____
9 x 6 = _____	9 x 7 = _____	9 x 6 = _____	9 x 7 = _____
9 x 8 = _____	9 x 7 = _____	9 x 9 = _____	9 x 7 = _____
9 x 8 = _____	9 x 6 = _____	9 x 8 = _____	9 x 7 = _____
9 x 8 = _____	9 x 9 = _____	9 x 9 = _____	9 x 6 = _____
9 x 9 = _____	9 x 7 = _____	9 x 9 = _____	9 x 8 = _____
9 x 9 = _____	9 x 8 = _____	9 x 6 = _____	9 x 9 = _____
9 x 7 = _____	9 x 9 = _____	9 x 6 = _____	9 x 8 = _____
9 x 9 = _____	9 x 7 = _____	9 x 6 = _____	9 x 8 = _____

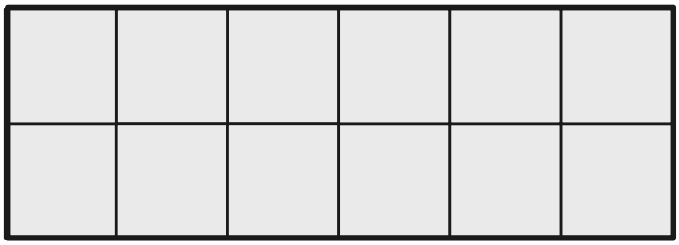
multiply by 9 (6–10)

Exit Ticket Packet

Name _____ Date _____

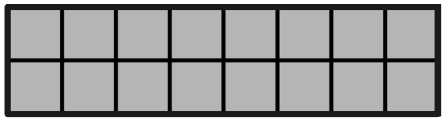
Each  is 1 square unit. Do both rectangles have the same area? Explain how you know.





Name _____ Date _____

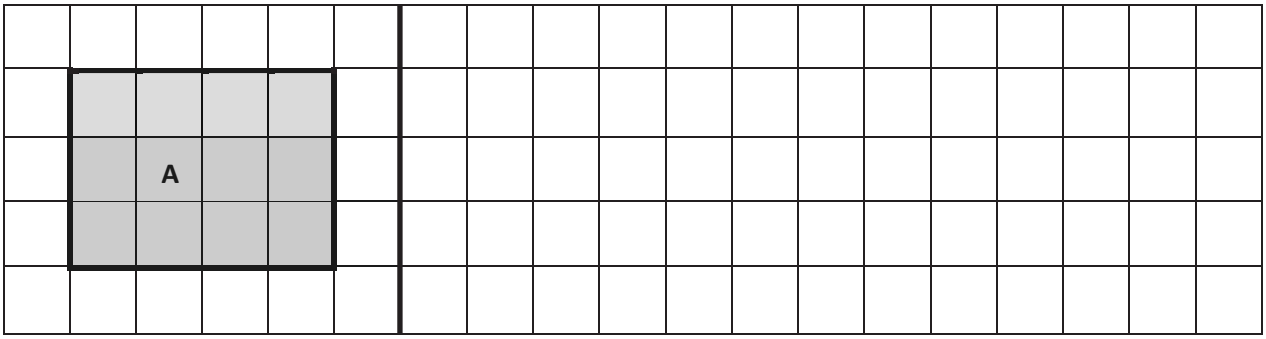
1. Each ▢ is a square unit. Find the area of the rectangle below. Then, draw a different rectangle with the same number of square units.



2. Zach creates a rectangle with an area of 6 square inches. Luke makes a rectangle with an area of 6 square centimeters. Do the two rectangles have the same area? Why or why not?

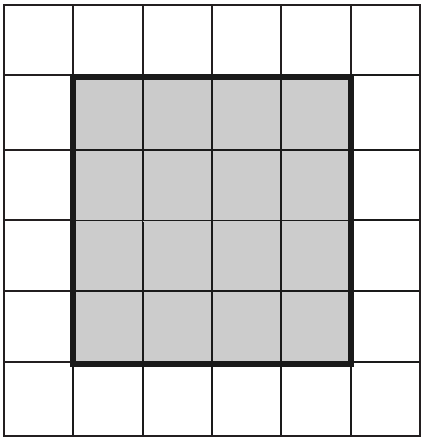
Name _____ Date _____

1. Each ☐ is 1 square unit. Write the area of Rectangle A. Then, draw a different rectangle with the same area in the space provided.



Area = _____

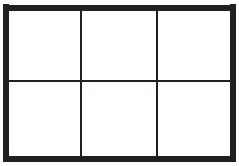
2. Each ☐ is 1 square unit. Does this rectangle have the same area as Rectangle A? Explain.



Name _____ Date _____

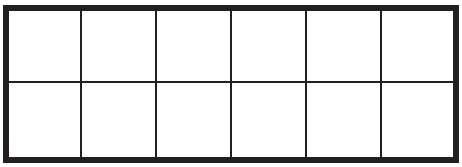
Label the side lengths of each rectangle. Then, match the rectangle to its total area.

a.



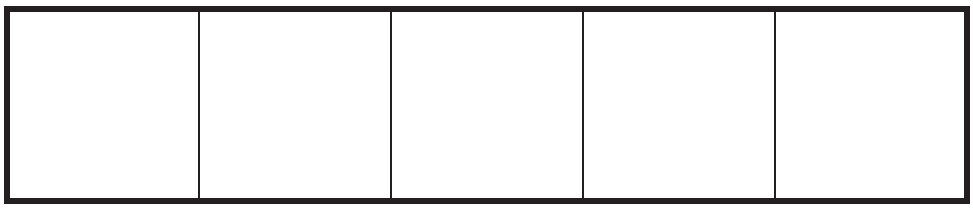
12 square centimeters

b.



5 square inches

c.



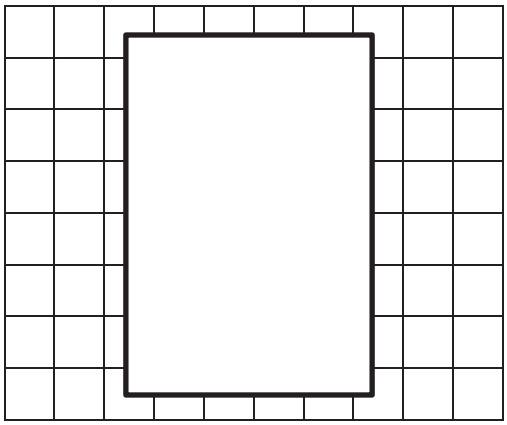
6 square centimeters

Name _____ Date _____

Darren has a total of 28 square centimeter tiles. He arranges them into 7 equal rows. Draw Darren's rectangle. Label the side lengths, and write a multiplication sentence to find the total area.

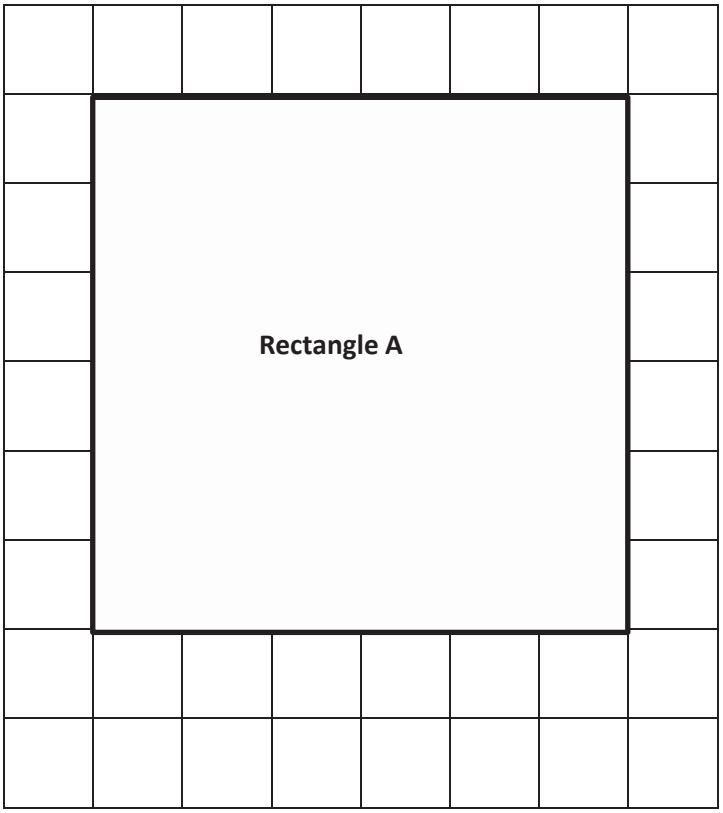
Name _____ Date _____

The tiled floor in Cayden's dining room has a rug on it as shown below. How many square tiles are on the floor, including the tiles under the rug?



Name _____ Date _____

1. Label the side lengths of Rectangle A on the grid below. Use a straight edge to draw a grid of equal size squares within Rectangle A. Find the total area of Rectangle A.

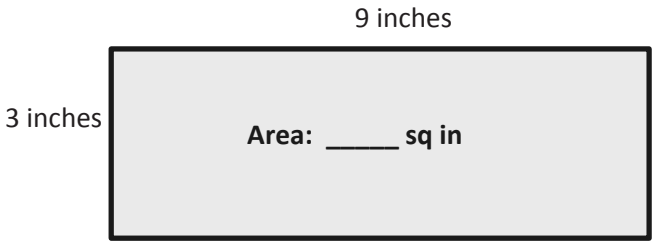


Area: _____ square units

2. Mark makes a rectangle with 36 square centimeter tiles. Gia makes a rectangle with 36 square inch tiles. Whose rectangle has a bigger area? Explain your answer.

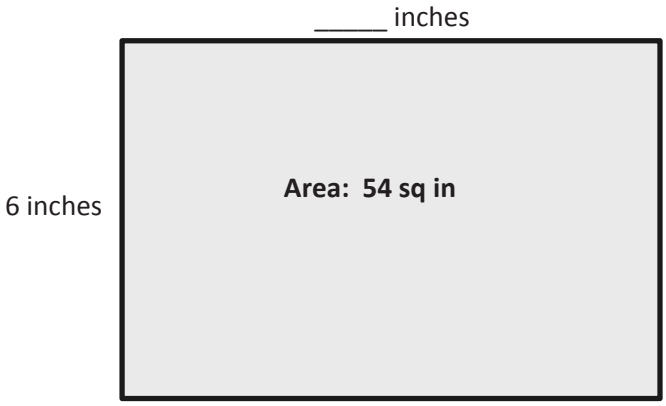
Name _____ Date _____

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



_____ × _____ = _____

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

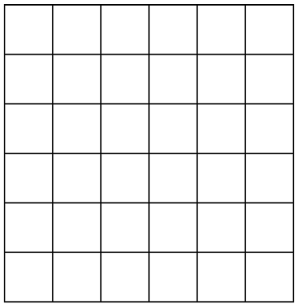


_____ × _____ = _____

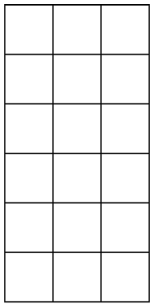
_____ ÷ _____ = _____

Name _____ Date _____

Lamar uses square tiles to make the 2 rectangles shown below.



Rectangle A



Rectangle B

1. Label the side lengths of the 2 rectangles.

2. Write equations to find the areas of the rectangles.

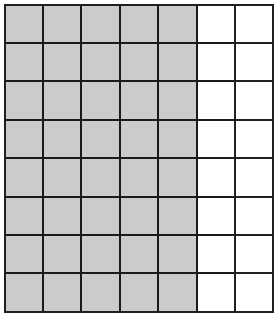
Area of Rectangle A: _____ Area of Rectangle B: _____

3. Lamar pushes Rectangle A next to Rectangle B to make a bigger rectangle. What is the area of the bigger rectangle? How do you know?

Name _____ Date _____

Label the side lengths of the shaded and unshaded rectangles. Then, find the total area of the large rectangle by adding the areas of the 2 smaller rectangles.

1.



8 × 7 = 8 × (_____ + _____)

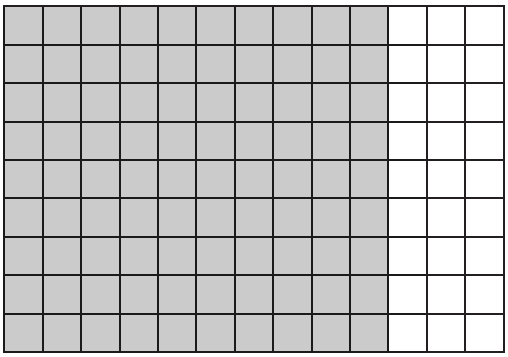
= (8 ×_____) + (8 ×_____)

= _____ + _____

= _____

Area: _____ square units

2.



9 × 13 = 9 × (_____+_____)

= (_____ × _____) + (_____×_____)

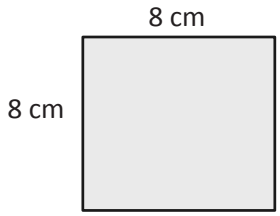
= _____ + _____

= _____

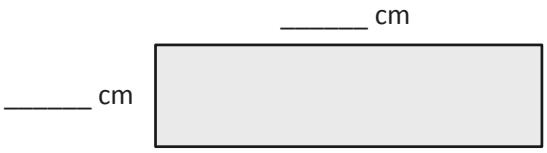
Area: _____ square units

Name _____ Date _____

1. Find the area of the rectangle.



2. The rectangle below has the same area as the rectangle in Problem 1. Move the parentheses to find the unknown side lengths. Then, solve.



Area: **8 × 8** = (4 × 2) × 8

= 4 × 2 × 8

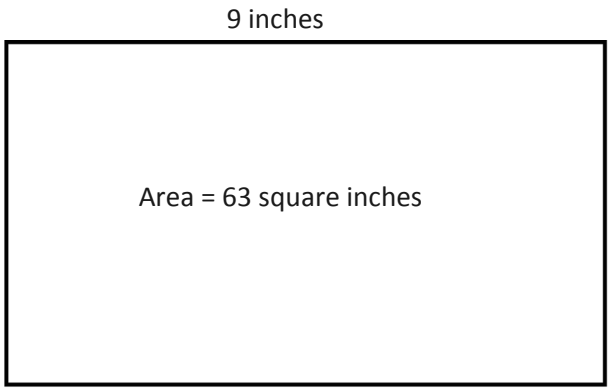
= _____ × _____

= _____

Area: _____ sq cm

Name _____ Date _____

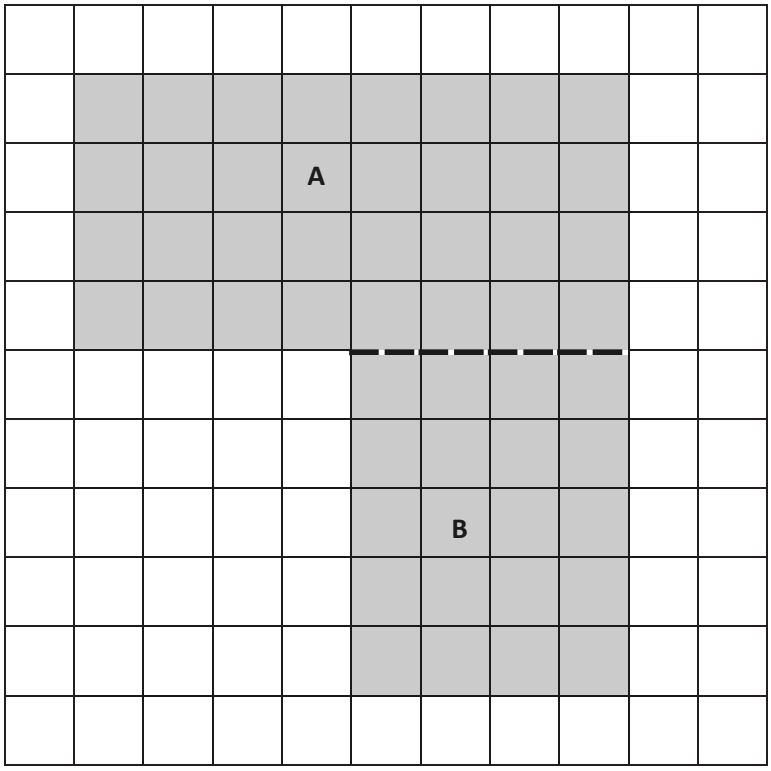
1. A painting has an area of 63 square inches. One side length is 9 inches. What is the other side length?



2. Judy's mini dollhouse has one floor and measures 4 inches by 16 inches. What is the total area of the dollhouse floor?

Name _____ Date _____

The following figure is made up of 2 rectangles. Find the total area of the figure.



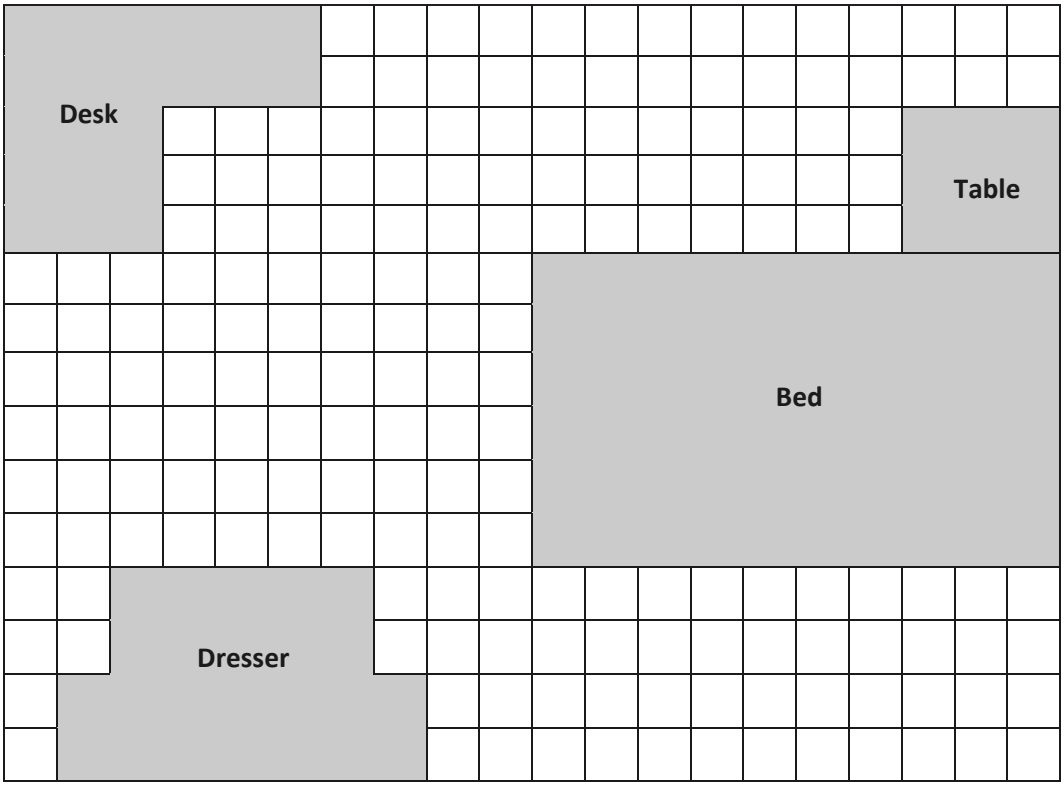
Area of A + Area of B: _____ sq units + _____ sq units = _____ sq units

Name _____ Date _____

Mary draws an 8 cm by 6 cm rectangle on her grid paper. She shades a square with a side length of 4 cm inside her rectangle. What area of the rectangle is left unshaded?

Name _____ Date _____

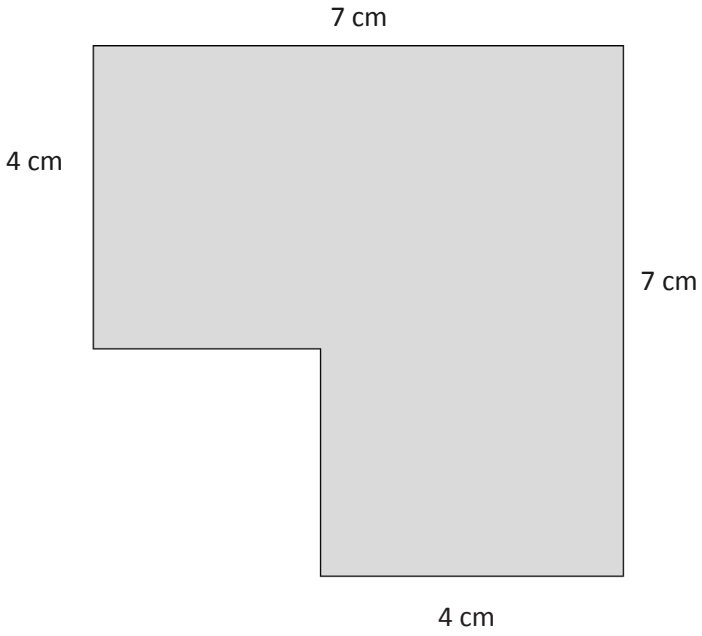
Jack uses grid paper to create a floor plan of his room. Label the unknown measurements, and find the area of the items listed below.



Name	Equations	Total Area
a. Jack's Room		_____ square units
b. Bed		_____ square units
c. Table		_____ square units
d. Dresser		_____ square units
e. Desk		_____ square units

Name _____ Date _____

Find the area of the shaded figure. Then, draw and label a rectangle with the same area.

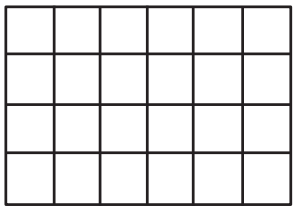


Assessment Packet

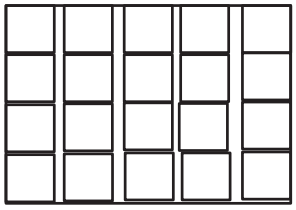
Name _____ Date _____

1. Jasmine and Roland each use unit squares to tile a piece of paper. Their work is shown below.

Jasmine's Array



Roland's Array



a. Can one of the arrays be used to correctly measure the area of the piece of paper? If so, whose array would you use? Explain why.

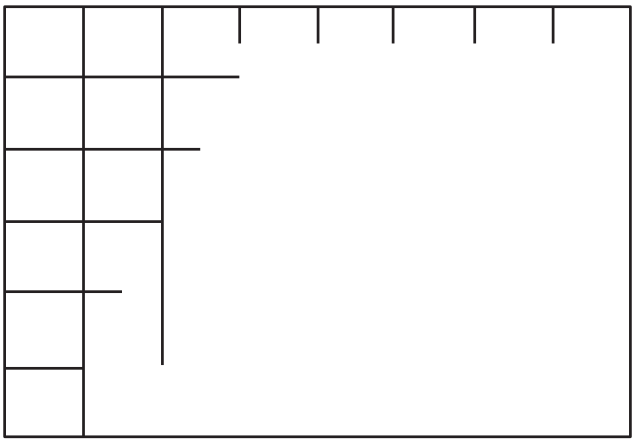
b. What is the area of the piece of paper? Explain your strategy for finding the area.

c. Jasmine thinks she can skip-count by sixes to find the area of her rectangle. Is she correct? Explain why or why not.

2. Jaheim says you can create three rectangles with different side lengths using 12 unit squares. Use pictures, numbers, and words to show what Jaheim is saying.

3. The area of a rectangle is 72 square units. One side has a length of 9 units. What is the other side length? Explain how you know using pictures, equations, and words.

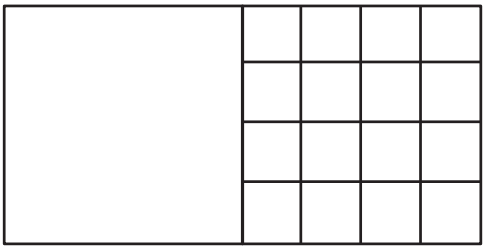
4. Jax started to draw a grid inside the rectangle to find its area.



   a. Use a straight edge to complete the drawing of the grid.
   b. Write a skip-count sequence you could use to find the area.

   c. Write a multiplication equation that you could use to find the area, and then solve.

5. Half of the rectangle below has been tiled with unit squares.

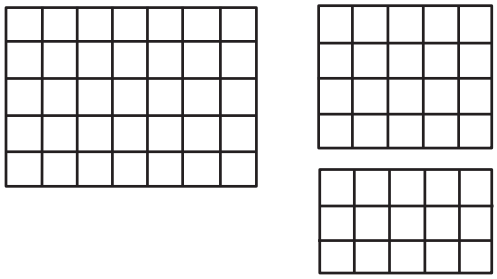


   a. How many more unit squares are needed to fill in the rest of the rectangle?

   b. What is the total area of the large rectangle? Explain how you found the area.

Name _____ Date _____

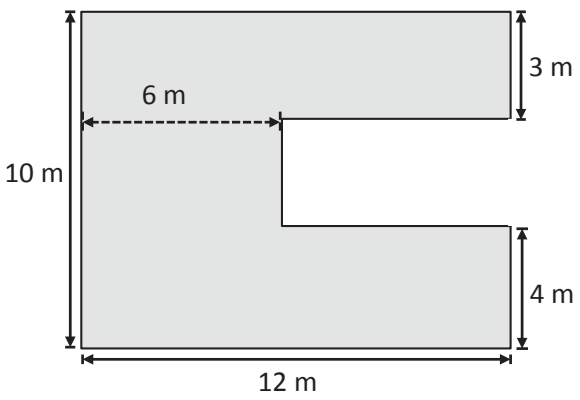
1. Sarah says the rectangle on the left has the same area as the sum of the two on the right. Pam says they do not have the same areas. Who is correct? Explain using numbers, pictures, and words.



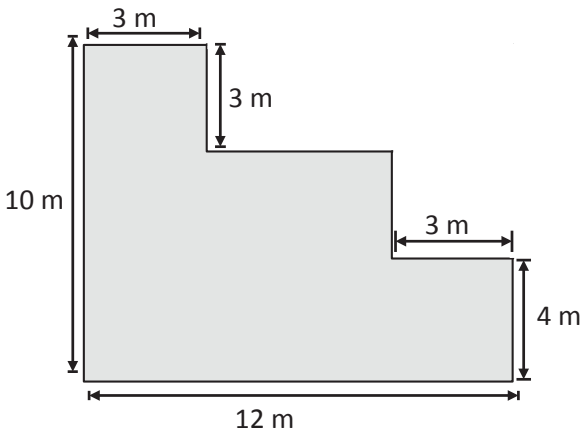
2. Draw three different arrays that you could make with 36 square inch tiles. Label the side lengths on each of your arrays. Write multiplication sentences for each array to prove that the area of each array is 36 square inches.

3. Mr. and Mrs. Jackson are buying a new house. They are deciding between the two floor plans below.

House A

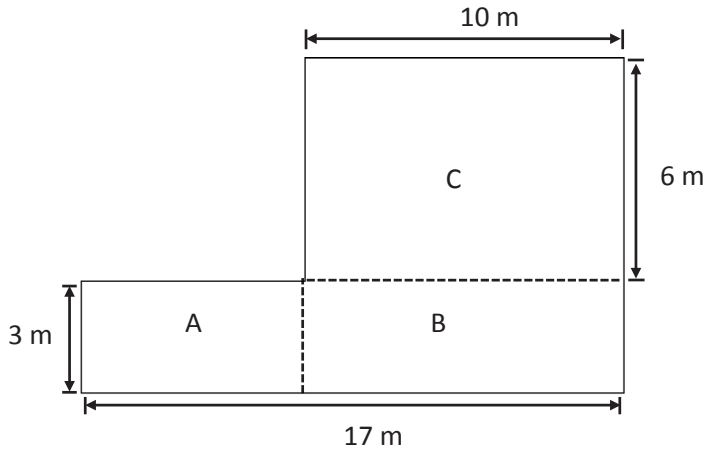


House B



Which floor plan has the greater area? Show how you found your answer on the drawings above. Show your calculations below.

4. Superior Elementary School uses the design below for their swimming pool. Shapes A, B, and C are rectangles.



a. Label the side lengths of Rectangles A and B on the drawing.

b. Find the area of each rectangle.

c. Find the area of the entire pool. Explain how you found the area of the pool.