

Area Builders

Use multiplication and addition to find area.

GRADE 3 • 3.MD.C.7

CCSS.Math.Content.3.MD.C.7 "Relate area to the operations of multiplication and addition."

NAME _____

DATE _____

AREA RULES

Area tells how much flat space is inside a shape. For a rectangle, multiply the number of rows by the number in each row. If a shape is made of rectangles, find each rectangle's area and add the areas.

WORKED EXAMPLE

Find the area of the rectangle shown.

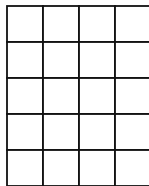
1. The rectangle is 7 cm long and 3 cm wide.
2. Multiply: $7 \times 3 = 21$.
3. Use square centimeters for area.

Answer: 21 square centimeters



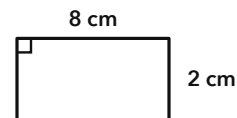
PRACTICE 6 problems

- 1** What is the area of the array shown? Write the answer in square units.



ANSWER _____

- 2** Find the area of the rectangle shown.



ANSWER _____

- 3** A rectangular game board is 9 inches long and 5 inches wide. What is its area?

ANSWER _____

- 4** A rectangular art mat has two side-by-side parts. One part is 5 cm by 4 cm. The other part is 2 cm by 4 cm. What is the total area of the mat?

ANSWER _____

- 5** A square tile has a side length of 4 inches. What is its area?

ANSWER _____

- 6** A rectangle has 5 equal rows and an area of 30 square units. How many unit squares are in each row?

ANSWER _____

APPLY IT Show your work

- 1** A robot arena is 8 feet long and 6 feet wide. What is the area of the arena floor?

WORK SPACE

ANSWER _____

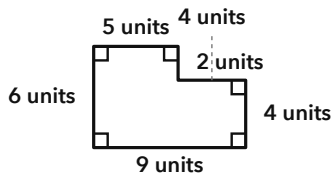
- 2** At a school fair, two nonoverlapping rectangular play zones are placed side by side. One zone is 5 yards by 6 yards. The other zone is 4 yards by 6 yards. What is the total area of both play zones?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The L-shaped patio is shown. Split it into two rectangles. Find its area, then explain how you added the two rectangle areas.



WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	What is the area of the array shown? Write the answer in square units.	20 square units
2	Find the area of the rectangle shown.	16 square centimeters
3	A rectangular game board is 9 inches long and 5 inches wide. What is its area?	45 square inches
4	A rectangular art mat has two side-by-side parts. One part is 5 cm by 4 cm. The other part is 2 cm by 4 cm. What is the total area of the mat?	28 square centimeters
5	A square tile has a side length of 4 inches. What is its area?	16 square inches
6	A rectangle has 5 equal rows and an area of 30 square units. How many unit squares are in each row?	6 unit squares

PART 2 • APPLY IT

- 48 square feet** Multiply the length by the width: $8 \times 6 = 48$.
- 54 square yards** Find each area, $5 \times 6 = 30$ and $4 \times 6 = 24$. Add $30 + 24 = 54$.

CHALLENGE

46 square units. Sample explanation: Split the patio into a 9 by 4 rectangle and a 5 by 2 rectangle. Add $36 + 10$ to get 46.

Accept equivalent multiplication expressions and area units written as square units, sq. units, or units squared. For the challenge, accept any correct split into nonoverlapping rectangles and a correct explanation.