

Tile It Up

Find the area of rectangles with unit squares.

GRADE 3 • 3.GSR.7.1

3.GSR.7.1 "Investigate area by covering the space of rectangles presented in realistic situations using multiple copies of the same unit, with no gaps or overlaps, and determine the total area (total number of units that covered the space)."

NAME _____

DATE _____

COVER AND COUNT

Area tells how many same-size unit squares cover a flat space. Cover a rectangle with no gaps or overlaps, then count all the squares. You can count rows or multiply the number in each row by the number of rows.

WORKED EXAMPLE

A rectangle is 7 unit squares long and 3 unit squares wide. What is its area?

1. There are 3 rows of unit squares.
2. Each row has 7 unit squares.
3. $7 + 7 + 7 = 21$.
4. $7 \times 3 = 21$.

Answer: 21 square units

PRACTICE 6 problems

- 1** A rectangle has 2 rows of 4 unit squares. What is its area?

ANSWER _____

- 2** A rectangle is 5 unit squares long and 6 unit squares wide. What is its area?

ANSWER _____

- 3** A rectangle has 8 unit squares in each of 2 rows. What is its area?

ANSWER _____

- 4** A rectangle is 9 unit squares long and 4 unit squares wide. What is its area?

ANSWER _____

- 5** A rectangle has 10 unit squares in each of 6 rows. What is its area?

ANSWER _____

- 6** A rectangle is 11 unit squares long and 2 unit squares wide. What is its area?

ANSWER _____

APPLY IT Show your work

- 1** Mia covers a rectangular game board with square stickers. The board has 4 rows of 8 stickers, with no gaps or overlaps. How many square stickers cover the board?

WORK SPACE

ANSWER _____

- 2** A class makes a rectangular garden sign with unit-square paper pieces. The sign is 6 pieces wide and 9 pieces long. How many unit-square pieces are needed to cover the sign?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A rectangular poster is covered by 48 unit squares with no gaps or overlaps. It has 6 equal rows. How many unit squares are in each row? What is the area of the poster?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A rectangle has 2 rows of 4 unit squares. What is its area?	8 square units
2	A rectangle is 5 unit squares long and 6 unit squares wide. What is its area?	30 square units
3	A rectangle has 8 unit squares in each of 2 rows. What is its area?	16 square units
4	A rectangle is 9 unit squares long and 4 unit squares wide. What is its area?	36 square units
5	A rectangle has 10 unit squares in each of 6 rows. What is its area?	60 square units
6	A rectangle is 11 unit squares long and 2 unit squares wide. What is its area?	22 square units

PART 2 • APPLY IT

1. **32 square stickers** Multiply the 4 rows by 8 stickers in each row. $4 \times 8 = 32$.
2. **54 unit-square pieces** Multiply the 6 pieces in each row by 9 rows. $6 \times 9 = 54$.

CHALLENGE

8 unit squares in each row; 48 square units

Accept answers stated as square units, unit squares, or the named covering item when appropriate. For the challenge, students should give both 8 squares per row and an area of 48 square units.