

Square Space Quest

Count unit squares to find area.

GRADE 3 • 3.MD.C.5b

CCSS.Math.Content.3.MD.C.5b "A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units."

NAME _____

DATE _____

COVER IT WITH SQUARES

Area tells how many unit squares cover a flat shape with no gaps and no overlaps. Count every unit square, or count equal rows of unit squares, to find the area in square units.

WORKED EXAMPLE

A rectangle has 3 rows of 7 unit squares. What is its area?

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

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 has 5 rows of 6 unit squares. What is its area?

ANSWER _____

- 3** A rectangle has 4 columns of 9 unit squares. What is its area?

ANSWER _____

- 4** A strip has 1 row of 8 unit squares. What is its area?

ANSWER _____

- 5** A square has 6 rows of 6 unit squares. What is its area?

ANSWER _____

- 6** A shape is covered completely by 20 unit squares, with no gaps or overlaps. What is its area?

ANSWER _____

APPLY IT Show your work

- 1** Mia makes a game mat with 4 rows of 5 square tiles. Each tile covers 1 square unit. What is the area of Mia's game mat?

WORK SPACE

ANSWER _____

- 2** A poster has 8 rows of 2 square stickers. Each sticker covers 1 square unit. What is the area covered by the stickers?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A step-shaped tile design has four rows. The top two rows each have 9 unit squares. The bottom two rows each have 5 unit squares. What is the area of the design? Explain how you counted.

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 has 5 rows of 6 unit squares. What is its area?	30 square units
3	A rectangle has 4 columns of 9 unit squares. What is its area?	36 square units
4	A strip has 1 row of 8 unit squares. What is its area?	8 square units
5	A square has 6 rows of 6 unit squares. What is its area?	36 square units
6	A shape is covered completely by 20 unit squares, with no gaps or overlaps. What is its area?	20 square units

PART 2 • APPLY IT

1. **20 square units** Count the tiles in equal rows: $4 \times 5 = 20$. The game mat covers 20 square units.
2. **16 square units** Multiply the number of rows by the stickers in each row: $8 \times 2 = 16$. The stickers cover 16 square units.

CHALLENGE

28 square units; $9 + 9 + 5 + 5 = 28$.

Accept answers that include the number and the unit square units. For the challenge, accept any correct addition or grouping that totals 28 square units.