

Square Space Detectives

Measure space by counting unit squares.

GRADE 3 • 3.MD.C.5a

CCSS.Math.Content.3.MD.C.5a "A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area."

NAME _____

DATE _____

COUNT THE SQUARES

A unit square has side lengths of 1 unit. It covers 1 square unit of area. To find area, count all the unit squares that cover a shape.

WORKED EXAMPLE

A rectangle is covered by 7 rows of 11 unit squares. What is its area?

1. There are 7 rows with 11 unit squares in each row.
2. Multiply: $7 \times 11 = 77$.
3. The rectangle covers 77 unit squares.

Answer: 77 square units

PRACTICE 6 problems

- 1** A rectangle has 2 rows with 3 unit squares in each row. What is its area?

ANSWER _____

- 2** A shape is covered by 5 rows of 4 unit squares. What is its area?

ANSWER _____

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

ANSWER _____

- 4** A rectangle is covered by 3 rows of 9 unit squares. What is its area?

ANSWER _____

- 5** A shape has 10 rows with 3 unit squares in each row. What is its area?

ANSWER _____

- 6** A rectangle has 12 rows with 2 unit squares in each row. What is its area?

ANSWER _____

APPLY IT Show your work

- 1** Noah has a sticker sheet with 6 rows of 5 square stickers. Each sticker covers 1 square unit. What is the area covered by all the stickers?

WORK SPACE

ANSWER _____

- 2** A game board has 8 rows of 9 square spaces. Each space is a unit square. What is the area of the game board?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Mia says a rectangle with 3 rows of 8 unit squares has 11 square units because $3 + 8 = 11$. Explain Mia's error. Then find the area.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A rectangle has 2 rows with 3 unit squares in each row. What is its area?	6 square units
2	A shape is covered by 5 rows of 4 unit squares. What is its area?	20 square units
3	A rectangle has 8 rows with 2 unit squares in each row. What is its area?	16 square units
4	A rectangle is covered by 3 rows of 9 unit squares. What is its area?	27 square units
5	A shape has 10 rows with 3 unit squares in each row. What is its area?	30 square units
6	A rectangle has 12 rows with 2 unit squares in each row. What is its area?	24 square units

PART 2 • APPLY IT

1. **30 square units** Count 6 groups of 5 unit squares. $6 \times 5 = 30$ square units.
2. **72 square units** Count 8 groups of 9 unit squares. $8 \times 9 = 72$ square units.

CHALLENGE

Mia added the number of rows and the number of squares in each row instead of counting all the unit squares. There are 3 groups of 8, so the area is 24 square units.

Accept answers that include the correct number and the label square units. For the challenge, accept any explanation that says Mia must count or multiply all 3 groups of 8.