

Square Space Detectives

Find area by counting unit squares.

GRADE 3 • NY-3.MD.6

NY-3.MD.6 "Measure areas by counting unit squares."

NAME _____

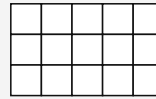
DATE _____

COUNT THE INSIDE SQUARES

Area tells how many unit squares cover the inside of a flat shape. Count every square once. You can count equal rows by adding the number of squares in each row.

WORKED EXAMPLE

Count the unit squares in the array.
What is its area?

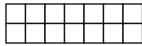


1. There are 3 rows.
2. Each row has 5 unit squares.
3. Count: $5 + 5 + 5 = 15$.

Answer: 15 square units

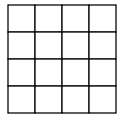
PRACTICE 6 problems

- 1** Count the unit squares in the array. What is its area?



ANSWER _____

- 2** Count the unit squares in the array. What is its area?



ANSWER _____

- 3** A rectangle has 6 rows of unit squares. Each row has 8 unit squares. What is the area?

ANSWER _____

- 4** A desk mat is covered by 2 rows of unit squares. Each row has 9 unit squares. What is the area?

ANSWER _____

- 5** Nia counts 7 rows with 4 unit squares in each row. She says the area is 11 square units. What is the correct area?

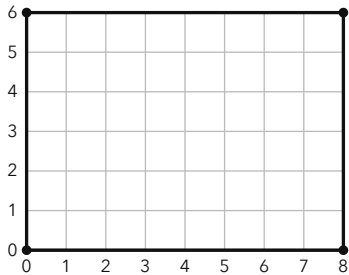
ANSWER _____

- 6** A square game board has 8 rows of unit squares and 8 unit squares in each row. What is its area?

ANSWER _____

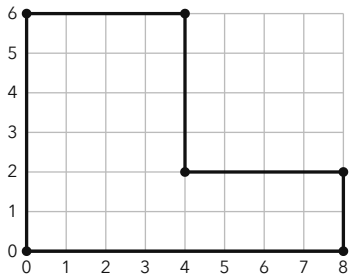
APPLY IT Show your work

- 1** A student is planning a rectangular mural. Each small square on the plan is 1 square unit. What area will the mural cover?



ANSWER _____

- 2** A robotics club will cover the L-shaped floor space outlined on the grid with 1-square-unit mats. How many square units of floor space will they cover?



ANSWER _____

CHALLENGE One step up

A game board is made from two rectangles that do not overlap. One section has 7 rows of 4 unit squares. The other section has 6 rows of 2 unit squares. What is the total area? Explain how you found it.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Count the unit squares in the array. What is its area?	14 square units
2	Count the unit squares in the array. What is its area?	16 square units
3	A rectangle has 6 rows of unit squares. Each row has 8 unit squares. What is the area?	48 square units
4	A desk mat is covered by 2 rows of unit squares. Each row has 9 unit squares. What is the area?	18 square units
5	Nia counts 7 rows with 4 unit squares in each row. She says the area is 11 square units. What is the correct area?	28 square units
6	A square game board has 8 rows of unit squares and 8 unit squares in each row. What is its area?	64 square units

PART 2 • APPLY IT

- 48 square units** The mural covers 6 rows of 8 unit squares. Count 8 squares in each of 6 rows for 48 square units.
- 32 square units** Count 16 unit squares in the bottom rectangle and 16 unit squares in the upper-left rectangle. Add $16 + 16$ to get 32 square units.

CHALLENGE

40 square units; $7 \times 4 = 28$ and $6 \times 2 = 12$, so $28 + 12 = 40$.

Accept "square units" or "unit squares" for all area answers. For the challenge, accept any correct explanation that finds 28 square units and 12 square units, then adds to 40 square units.