LESSON MAKER PRO

Square Unit Detectives

Use unit squares to measure area.

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."

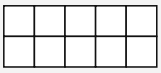
NAME _____ DATE _____

ONE SQUARE UNIT

A unit square has side length 1 unit. It covers 1 square unit of area. To find area, count the unit squares that cover a shape with no gaps or overlaps.

WORKED EXAMPLE

Look at the rectangle made of unit squares. What is its area?

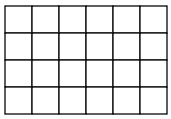


1. Count 2 rows of unit squares.
2. Count 5 unit squares in each row.
3. Multiply 2 × 5 = 10.

Answer: 10 square units

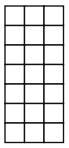
PRACTICE 6 problems

1 Look at the rectangle made of unit squares. What is its area?



ANSWER _____

2 Look at the rectangle made of unit squares. What is its area?



ANSWER _____

3 A rectangle is covered by 8 rows of 9 unit squares. What is its area?

ANSWER _____

4 A shape is covered exactly by 49 unit squares. What is its area?

ANSWER _____

5 A tiny square has side length 1 unit. What is this square called, and what area does it cover?

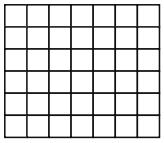
ANSWER _____

6 A rectangle has 12 rows of 4 unit squares. What is its area?

ANSWER _____

APPLY IT Show your work

1 At the library makerspace, a robot display uses the unit-square panel shown. How many square units does the panel cover?



ANSWER _____

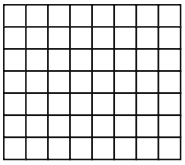
2 A gamer makes a square pixel poster with 9 unit squares along each side. What is the area of the poster?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Nico says the rectangle shown has an area of 15 square units because 7 + 8 = 15. Explain why Nico is wrong. Then find the correct area.



WORK SPACE AND ANSWER

ANSWER KEY

Square Unit Detectives

GRADE 3 · 3.MD.C.5a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Look at the rectangle made of unit squares. What is its area?	**24 square units**
2	Look at the rectangle made of unit squares. What is its area?	**21 square units**
3	A rectangle is covered by 8 rows of 9 unit squares. What is its area?	**72 square units**
4	A shape is covered exactly by 49 unit squares. What is its area?	**49 square units**
5	A tiny square has side length 1 unit. What is this square called, and what area does it cover?	**a unit square; 1 square unit**
6	A rectangle has 12 rows of 4 unit squares. What is its area?	**48 square units**

PART 2 · APPLY IT

1. **42 square units** The panel has 6 rows with 7 unit squares in each row. Multiply 6 × 7 to get 42 square units.
2. **81 square units** The poster has 9 rows of 9 unit squares. Multiply 9 × 9 to get 81 square units.

CHALLENGE

Nico added the side lengths instead of counting all the unit squares. The area is 56 square units because 7 × 8 = 56.

Accept answers written as "square units" or "sq units." For the challenge, accept any explanation that says area is found by counting or multiplying all unit squares, not by adding the row and column counts.