

Area Action

Use rows, columns, multiplication, and addition to find area.

GRADE 3 • NY-3.MD.7

NY-3.MD.7 "Relate area to the operations of multiplication and addition."

NAME _____

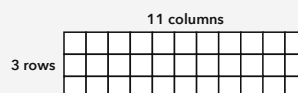
DATE _____

AREA WITH ARRAYS

Area tells how many square units cover a flat shape. For a rectangle, multiply the number of rows by the number of columns. You can also add equal rows to find the same total.

WORKED EXAMPLE

Find the area of the array.

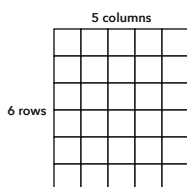


1. There are 11 squares in each row.
2. There are 3 equal rows.
3. $11 + 11 + 11 = 33$.
4. $11 \times 3 = 33$.

Answer: 33 square units

PRACTICE 6 problems

- 1** Find the area of the array.



ANSWER _____

- 2** A rectangle is 9 units long and 2 units wide. What is its area?

ANSWER _____

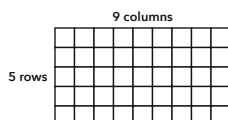
- 3** A notebook cover is 5 cm long and 6 cm wide. What is its area?

ANSWER _____

- 4** A large rectangle is made from two smaller rectangles. One part is 5 units by 2 units. The other part is 5 units by 6 units. What is the total area?

ANSWER _____

- 5** Find the area of the array.



ANSWER _____

- 6** A rectangle has 2 rows of 12 square units. Write an addition equation and find the area.

ANSWER _____

APPLY IT Show your work

- 1** Maya makes a sticker display with 5 rows of 9 square stickers. Each sticker covers 1 square unit. What is the area of Maya's sticker display?

WORK SPACE

ANSWER _____

- 2** A game mat is made from two rectangles placed side by side. One rectangle is 6 cm by 5 cm. The other rectangle is 6 cm by 9 cm. What is the total area of the game mat?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A mural is 10 units long and 5 units wide. It is divided into sections that are 4 units, 4 units, and 2 units wide. Each section is 5 units tall. Find the total area in two ways: multiply the whole mural, then add the areas of the sections.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find the area of the array.	30 square units
2	A rectangle is 9 units long and 2 units wide. What is its area?	18 square units
3	A notebook cover is 5 cm long and 6 cm wide. What is its area?	30 square centimeters
4	A large rectangle is made from two smaller rectangles. One part is 5 units by 2 units. The other part is 5 units by 6 units. What is the total area?	40 square units
5	Find the area of the array.	45 square units
6	A rectangle has 2 rows of 12 square units. Write an addition equation and find the area.	$12 + 12 = 24$; 24 square units

PART 2 • APPLY IT

- 45 square units** Multiply the rows by the stickers in each row: $5 \times 9 = 45$.
- 84 square centimeters** Find each part: $6 \times 5 = 30$ and $6 \times 9 = 54$. Add $30 + 54 = 84$.

CHALLENGE

50 square units; $10 \times 5 = 50$ and $(4 \times 5) + (4 \times 5) + (2 \times 5) = 20 + 20 + 10 = 50$

Accept multiplication factors in either order and correct repeated addition equations. Accept square units, square centimeters, or the unit written in words.