

Rectangle Detectives

Use side lengths to find area and perimeter.

GRADE 4 • MA.4.GR.2

MA.4.GR.2 "Solve problems involving the perimeter and area of rectangles."

NAME _____

DATE _____

AREA OR PERIMETER?

Perimeter is the distance around a rectangle, so add all four sides. Area is the space inside a rectangle, so multiply the length by the width.

WORKED EXAMPLE

A rectangle is 9 units long and 4 units wide. Find its perimeter and area.

1. Perimeter: $9 + 4 + 9 + 4 = 26$ units.

2. Area: $9 \times 4 = 36$ square units.

Answer: Perimeter = 26 units. Area = 36 square units.

PRACTICE 6 problems

- 1** A rectangle is 8 units long and 3 units wide. What is its area?

ANSWER _____

- 2** A rectangle is 6 cm long and 2 cm wide. What is its perimeter?

ANSWER _____

- 3** A rectangle is 10 m long and 3 m wide. What is its area?

ANSWER _____

- 4** A rectangle is 12 inches long and 2 inches wide. What is its perimeter?

ANSWER _____

- 5** A rectangle has an area of 42 square feet and a width of 6 feet. What is its length?

ANSWER _____

- 6** A rectangle has a perimeter of 22 cm and a length of 8 cm. What is its width?

ANSWER _____

APPLY IT Show your work

- 1** Jay is making a border around a rectangular trading-card display that is 14 inches long and 6 inches wide. How many inches of border does Jay need?

WORK SPACE

ANSWER _____

- 2** A rectangular pixel-art poster is 13 squares wide and 8 squares tall. How many square units are on the poster?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A rectangular puppy play area has a perimeter of 34 meters. Its length is 11 meters. What is the area of the play area?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A rectangle is 8 units long and 3 units wide. What is its area?	24 square units
2	A rectangle is 6 cm long and 2 cm wide. What is its perimeter?	16 cm
3	A rectangle is 10 m long and 3 m wide. What is its area?	30 square meters
4	A rectangle is 12 inches long and 2 inches wide. What is its perimeter?	28 inches
5	A rectangle has an area of 42 square feet and a width of 6 feet. What is its length?	7 feet
6	A rectangle has a perimeter of 22 cm and a length of 8 cm. What is its width?	3 cm

PART 2 • APPLY IT

1. **40 inches** Add all four sides: $14 + 6 + 14 + 6 = 40$. Jay needs 40 inches of border.
2. **104 square units** Multiply the length and width: $13 \times 8 = 104$. The poster has an area of 104 square units.

CHALLENGE

66 square meters

Accept equivalent addition methods for perimeter and multiplication methods for area. Units should match the question, with square units required for area.