

Rectangle Detectives

Find the distance around and space inside rectangles.

GRADE 3 • MA.3.GR.2

MA.3.GR.2 "Solve problems involving the perimeter and area of rectangles."

NAME _____

DATE _____

PERIMETER AND AREA

Perimeter is the distance around a rectangle. Add the length and width, then double the total to find perimeter. Area is the space inside a rectangle, so multiply length x width and use square units.

WORKED EXAMPLE

A rectangle is 8 cm long and 5 cm wide. What is its perimeter?

1. Add the side lengths: $8 + 5 = 13$.

2. Double the total: $2 \times 13 = 26$ cm.

Answer: 26 cm

PRACTICE 6 problems

- 1** A rectangle is 6 cm long and 4 cm wide. Find its perimeter.

ANSWER _____

- 2** A rectangle is 10 cm long and 3 cm wide. Find its area.

ANSWER _____

- 3** A rectangle is 11 m long and 7 m wide. Find its perimeter.

ANSWER _____

- 4** A rectangle is 7 in. long and 6 in. wide. Find its area.

ANSWER _____

- 5** A rectangle has a perimeter of 32 cm. Its length is 12 cm. What is its width?

ANSWER _____

- 6** A rectangle has an area of 63 square cm. Its length is 9 cm. What is its width?

ANSWER _____

APPLY IT Show your work

- 1** Mia is putting a ribbon border around a rectangular poster that is 14 cm long and 6 cm wide. How many centimeters of ribbon does she need?

WORK SPACE

ANSWER _____

- 2** A rectangular game-card display is 15 cm long and 4 cm wide. What area does the display cover?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A rectangle has a perimeter of 36 cm. Its length is 4 cm longer than its width. What are its length and width? Then find its area. Show how you know.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A rectangle is 6 cm long and 4 cm wide. Find its perimeter.	20 cm
2	A rectangle is 10 cm long and 3 cm wide. Find its area.	30 square cm
3	A rectangle is 11 m long and 7 m wide. Find its perimeter.	36 m
4	A rectangle is 7 in. long and 6 in. wide. Find its area.	42 square in.
5	A rectangle has a perimeter of 32 cm. Its length is 12 cm. What is its width?	4 cm
6	A rectangle has an area of 63 square cm. Its length is 9 cm. What is its width?	7 cm

PART 2 • APPLY IT

1. **40 cm** Find the perimeter: $14 + 6 = 20$, then double 20. Mia needs 40 cm of ribbon.
2. **60 square cm** Multiply the length by the width: $15 \times 4 = 60$. The display covers 60 square cm.

CHALLENGE

Width: 7 cm; length: 11 cm; area: 77 square cm

Accept correct units and equivalent wording for perimeter and area. For the challenge, accept any clear reasoning that identifies 7 cm and 11 cm as the side lengths and 77 square cm as the area.