

Rectangle Ready

Find area and perimeter in everyday spaces.

GRADE 4 • 4.MG.3.f

4.MG.3.f "Solve contextual problems involving area and perimeter of rectangles and squares."

NAME _____

DATE _____

AREA OR PERIMETER?

Area is the number of square units inside a rectangle or square. Multiply length by width to find area. Perimeter is the distance around the outside, so add all four sides or use $2 \times \text{length} + 2 \times \text{width}$.

WORKED EXAMPLE

A rectangle is 13 cm long and 2 cm wide. What are its area and perimeter?

1. Area = 13×2

2. Area = 26 square cm

3. Perimeter = $13 + 2 + 13 + 2 = 30$ cm

Answer: Area: 26 square cm; Perimeter: 30 cm

PRACTICE 6 problems

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

ANSWER _____

- 2** A square has side lengths of 7 cm. What is its perimeter?

ANSWER _____

- 3** A rectangle is 9 in. long and 5 in. wide. What is its perimeter?

ANSWER _____

- 4** A square tile has side lengths of 6 in. What is its area?

ANSWER _____

- 5** A rectangle has an area of 35 square in. and a length of 5 in. What is its width?

ANSWER _____

- 6** A rectangle has a perimeter of 24 ft. Its width is 5 ft. What is its length?

ANSWER _____

APPLY IT Show your work

- 1** The video game club makes a rectangular display that is 12 ft long and 7 ft wide. How many square feet of paper are needed to cover the display?

WORK SPACE

ANSWER _____

- 2** A dog park has a rectangular running area that is 15 m long and 8 m wide. How many meters of fence are needed to go around it once?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A rectangular photo board has a perimeter of 32 in. Its length is 9 in. What is its area? Explain how you found the missing width.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A rectangle is 8 m long and 3 m wide. What is its area?	24 square m
2	A square has side lengths of 7 cm. What is its perimeter?	28 cm
3	A rectangle is 9 in. long and 5 in. wide. What is its perimeter?	28 in.
4	A square tile has side lengths of 6 in. What is its area?	36 square in.
5	A rectangle has an area of 35 square in. and a length of 5 in. What is its width?	7 in.
6	A rectangle has a perimeter of 24 ft. Its width is 5 ft. What is its length?	7 ft

PART 2 • APPLY IT

1. **84 square ft** Multiply 12×7 to find the area. The display needs 84 square ft of paper.
2. **46 m** Add all four sides: $15 + 8 + 15 + 8$. The fence length is 46 m.

CHALLENGE

The width is 7 in. because $9 + 7 + 9 + 7 = 32$. The area is $9 \times 7 = 63$ square in.

Accept correct answers with equivalent unit wording, such as square centimeters for square cm. For the challenge, accept any clear explanation that finds a width of 7 in. before calculating the area.