LESSON MAKER PRO

Rectangle Detectives

Find perimeter and area with rectangle clues.

GRADE 4 · MA.4.GR.2

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

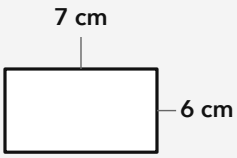
NAME _____ DATE _____

TWO RECTANGLE MEASURES

For a rectangle, add the lengths of all four sides to find perimeter. Multiply length by width to find area. Perimeter uses units such as cm, and area uses square units such as square cm.

WORKED EXAMPLE

Find the perimeter and area of the rectangle shown.

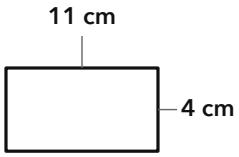


1. Perimeter = 7 + 6 + 7 + 6.
2. Perimeter = 26 cm.
3. Area = 7 × 6 = 42 square cm.

Answer: Perimeter: 26 cm; area: 42 square cm

PRACTICE 6 problems

1 Use the rectangle shown. Find its area and perimeter.



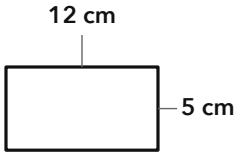
ANSWER _____

_____

2 A rectangle is 10 cm long and 4 cm wide. What is its perimeter?

ANSWER _____

3 Use the rectangle shown. Find its area and perimeter.



ANSWER _____

_____

4 A rectangle has a length of 13 cm and a width of 3 cm. What is its area?

ANSWER _____

5 A rectangle has an area of 40 square cm and a width of 4 cm. Find its length and perimeter.

ANSWER _____

_____

6 A rectangle has a perimeter of 30 cm and a length of 11 cm. Find its width and area.

ANSWER _____

_____

APPLY IT Show your work

1 Kai is making a rectangular poster for a game club. The poster is 14 cm long and 9 cm wide. How many square cm of paper does Kai need, and how many cm of border will go around the edge?

WORK SPACE

ANSWER _____

2 A rectangular display for trading cards is 15 cm long and 8 cm wide. What is the area of the display, and what is its perimeter?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Rectangle A is 12 cm long and 5 cm wide. Rectangle B is 4 cm wide and has the same perimeter as Rectangle A. Find the length of Rectangle B. Then find how many more square cm Rectangle A covers than Rectangle B.

WORK SPACE AND ANSWER

ANSWER KEY # Rectangle Detectives

GRADE 4 · MA.4.GR.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the rectangle shown. Find its area and perimeter.	**Area: 44 square cm; perimeter: 30 cm**
2	A rectangle is 10 cm long and 4 cm wide. What is its perimeter?	**28 cm**
3	Use the rectangle shown. Find its area and perimeter.	**Area: 60 square cm; perimeter: 34 cm**
4	A rectangle has a length of 13 cm and a width of 3 cm. What is its area?	**39 square cm**
5	A rectangle has an area of 40 square cm and a width of 4 cm. Find its length and perimeter.	**Length: 10 cm; perimeter: 28 cm**
6	A rectangle has a perimeter of 30 cm and a length of 11 cm. Find its width and area.	**Width: 4 cm; area: 44 square cm**

PART 2 · APPLY IT

1. **126 square cm of paper; 46 cm of border** Multiply 14 by 9 to find the area. Add 14 + 9 + 14 + 9 to find the perimeter.
2. **Area: 120 square cm; perimeter: 46 cm** Multiply 15 by 8 for the area. Add the four side lengths, or use 2 × 15 + 2 × 8, for the perimeter.

CHALLENGE

Rectangle B is 13 cm long. Rectangle A covers 8 more square cm than Rectangle B.

Accept equivalent wording for perimeter and area answers when the values and units are correct. For the challenge, Rectangle A has area 60 square cm and Rectangle B has area 52 square cm.