

Grade 4 - Area and Perimeter of Rectangles - Quiz

Common Core 4.MD.A.3 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

Try this 10-question quiz on the area and perimeter of rectangles. Pick the best answer for each question. Some questions show a picture. The explanations point out common mistakes, like mixing up area and perimeter.

Grade 4 · Common Core State Standards: **4.MD.A.3**

Questions

Question 1

What is the area of a rectangle that is 9 ft long and 4 ft wide?

- A. 36 square feet
- B. 26 square feet
- C. 13 square feet
- D. 18 square feet

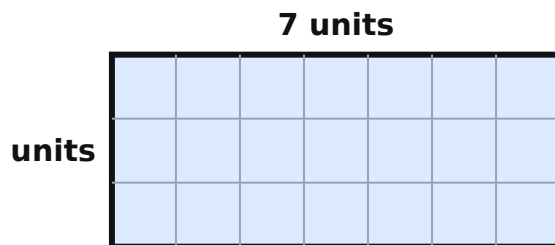
Question 2

What is the perimeter of a rectangle that is 9 ft long and 4 ft wide?

- A. 36 feet
- B. 13 feet
- C. 26 feet
- D. 18 feet

Question 3

Count the squares. What is the area of the rectangle?



- A. 21 square units
- B. 20 square units
- C. 10 square units
- D. 14 square units

Question 4

A rectangle has an area of 56 sq in and a length of 8 in. What is the width?

- A. 48 in
- B. 7 in
- C. 448 in
- D. 64 in

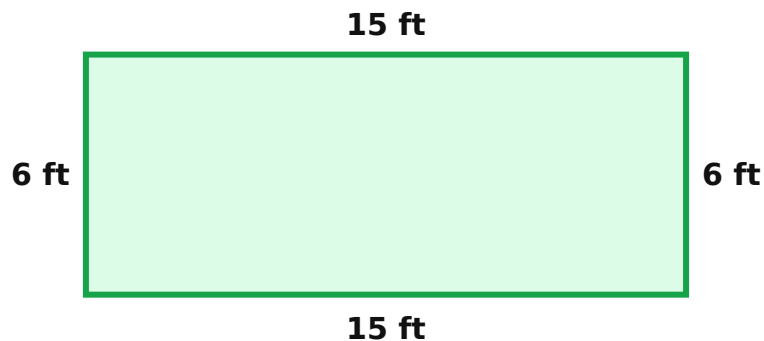
Question 5

A rectangle has a perimeter of 24 ft and a length of 8 ft. What is the width?

- A. 4 ft
- B. 8 ft
- C. 16 ft
- D. 3 ft

Question 6

A dog run is 15 ft by 6 ft. How much fence goes all the way around it?



All four sides are labeled.

- A. 90 ft
- B. 42 ft
- C. 21 ft
- D. 36 ft

Question 7

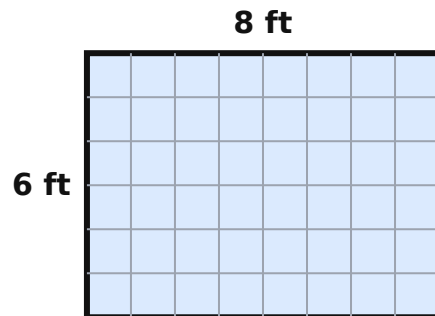
Which rectangle with a perimeter of 16 ft has the greatest area?

- A. 5 ft by 3 ft
- B. 6 ft by 2 ft

- C. 4 ft by 4 ft
- D. 7 ft by 1 ft

Question 8

A 4 ft by 3 ft rectangle has both sides doubled. What is the new area?



Original 4 by 3, new 8 by 6.

- A. 24 square feet
- B. 48 square feet
- C. 14 square feet
- D. 28 square feet

Question 9

Which job needs the area of a rectangle, not the perimeter?

- A. Putting a fence around a yard
- B. Hanging lights around a window
- C. Gluing trim along the edge of a table
- D. Covering a floor with carpet

Question 10

A square tile has a side of 5 in. What is its perimeter?

- A. 25 in
- B. 10 in
- C. 15 in
- D. 20 in

Answers

1. **A** - Area = $9 \times 4 = 36$ square feet. 26 is the perimeter, and 13 comes from adding the sides.
2. **C** - Perimeter = $2 \times 9 + 2 \times 4 = 26$ feet. 36 is the area, and 13 only adds one length and one width.
3. **A** - There are 3 rows of 7 squares, so $3 \times 7 = 21$. 10 adds the sides, and 20 is the perimeter.
4. **B** - Divide: $56 \div 8 = 7$ in. Subtracting, multiplying, or adding the numbers does not undo the area formula.
5. **A** - Two lengths use 16 ft, so $24 - 16 = 8$ ft is left for two widths, and $8 \div 2 = 4$ ft. Stopping at 8 forgets to split between two widths.
6. **B** - Fence is perimeter: $15 + 6 + 15 + 6 = 42$ ft. 90 is the area, and 36 forgets one side.
7. **C** - The areas are 16, 15, 12, and 7 square feet. The shape closest to a square covers the most.
8. **B** - The new sides are 8 ft and 6 ft, so $8 \times 6 = 48$. Doubling both sides makes the area 4 times as big, not 2 times.
9. **D** - Carpet covers the inside of a space, so use area. The other jobs go around an edge, so they use perimeter.
10. **D** - Perimeter = $4 \times 5 = 20$ in. 25 is the area, and 10 only adds two sides.

Remember

- Area of a rectangle = length $\times$ width, measured in square units.
- Perimeter of a rectangle = $2 \times$ length + $2 \times$ width, measured in plain units.
- A square is a rectangle whose four sides are equal.
- If you know the area and one side, divide to find the other side.
- Area tells how much to cover; perimeter tells how far around.