

Grade 3 · Perimeter · Quiz

Common Core 3.MD.D.8 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

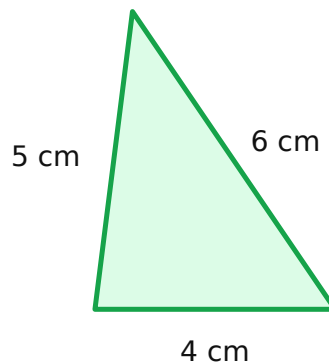
Ten multiple-choice questions on perimeter: adding side lengths, unknown sides, squares and rectangles, and comparing shapes with the same perimeter or area. Choose the one correct answer, then read the explanation.

Grade 3 Common Core: 3.MD.D.8

Questions

Question 1

What is the perimeter of the triangle?



A triangle with sides 4, 5 and 6 cm.

- A. 10 cm
- B. 15 cm
- C. 20 cm
- D. 30 cm

Question 2

A rectangle is 9 inches long and 5 inches wide. What is its perimeter?

- A. 14 inches
- B. 45 inches
- C. 19 inches
- D. 28 inches

Question 3

A square has sides of 7 feet. What is its perimeter?

- A. 14 feet
- B. 28 feet
- C. 49 feet
- D. 21 feet

Question 4

A triangle has a perimeter of 30 cm. Two sides are 11 cm and 9 cm. How long is the third side?

- A. 10 cm
- B. 20 cm
- C. 30 cm
- D. 50 cm

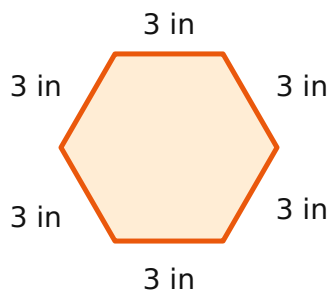
Question 5

A rectangle has a perimeter of 26 cm and a length of 8 cm. What is its width?

- A. 5 cm
- B. 18 cm
- C. 13 cm
- D. 10 cm

Question 6

All sides of the regular hexagon are 3 inches long. What is its perimeter?

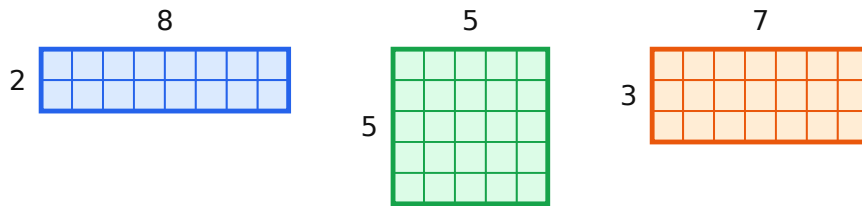


A regular hexagon.

- A. 9 inches
- B. 12 inches
- C. 36 inches
- D. 18 inches

Question 7

All three rectangles have a perimeter of 20 units. Which has the greatest area?



Three rectangles with the same perimeter.

- A. The 8 by 2 rectangle
- B. The 7 by 3 rectangle
- C. The 5 by 5 square
- D. They all have the same area

Question 8

Which rectangle has a perimeter of 18 units?

- A. 7 by 2
- B. 6 by 4
- C. 5 by 3
- D. 5 by 5

Question 9

A 12 by 1 rectangle and a 3 by 4 rectangle both have an area of 12 square units. What are their perimeters?

- A. 13 units and 7 units
- B. 26 units and 26 units
- C. 12 units and 12 units
- D. 26 units and 14 units

Question 10

A rectangular yard is 15 feet long and 10 feet wide. Fence comes in 10-foot sections. How many sections go all the way around?

- A. 25 sections
- B. 15 sections
- C. 5 sections
- D. 50 sections

Answer key

1. **B** - Add all three sides: $4+5+6=15$. The answer 10 cm leaves out a side.
2. **D** - $9+5+9+5=28$. Adding only $9 + 5 = 14$ skips two sides, and 45 is the area.
3. **B** - A square has 4 equal sides: $4\times 7=28$. The number 49 is the area in square feet.
4. **A** - $11+9=20$ and $30-20=10$. The answer 20 cm is only the sum of the known sides.
5. **A** - $26-8-8=10$ is the total of both widths, so one width is $10\div 2=5$. Subtracting once gives 18, which is wrong.
6. **D** - A hexagon has 6 sides: $6\times 3=18$. The answer 9 inches counts only 3 sides.
7. **C** - The areas are 16, 25 and 21 square units. Same perimeter does not mean same area.
8. **A** - $7+2+7+2=18$. The other rectangles have perimeters of 20, 16 and 20 units.
9. **D** - $12+1+12+1=26$ and $3+4+3+4=14$. The same area can have different perimeters.
10. **C** - The perimeter is $15+10+15+10=50$ feet, and $50\div 10=5$. The number 25 is half the perimeter, not the number of sections.

Remember:

- Perimeter is the total distance around a polygon.
- Add all the side lengths to find the perimeter.
- A rectangle's perimeter is length + width + length + width.
- For an unknown side, subtract the known sides from the perimeter.
- Rectangles with the same perimeter can have different areas.