Perimeter, circles and composite figures

Free Extra Maths Class · Grade 7

Name: _____

Remember: Perimeter = around the edge (cm). Area = inside (cm²). d = 2 × r and C = π × d ≈ 3,14 × d.

1. Calculate the perimeter of a 14 cm by 6 cm rectangle.

Answer: _____

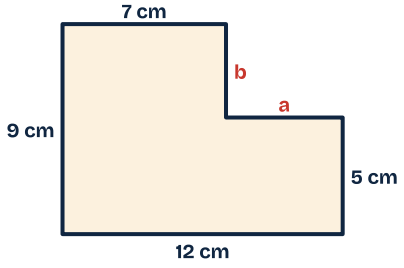
2. The perimeter of a square is 52 cm. How long is one side?

Answer: _____

3. A regular hexagon has sides of 7,5 cm. Calculate the perimeter.

Answer: _____

4. Calculate the lengths a and b.



Answer: _____

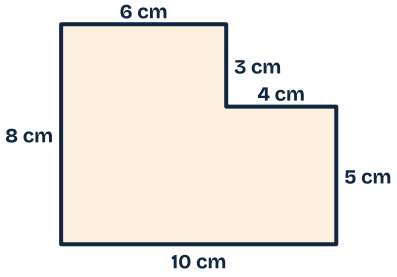
5. Calculate the perimeter of the figure in question 4.

Answer: _____

6. Calculate the area of the figure in question 4.

Answer: _____

7. Calculate the perimeter of the figure.



Answer: _____

8. Calculate the area of the figure in question 7.

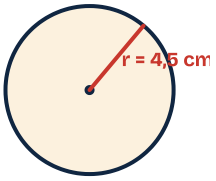
Answer: _____

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9. A vegetable garden is 12 m by 7 m. Fencing costs R35 per metre. How much does the fence around the whole garden cost?

Answer: _____

10. The radius of the circle is 4,5 cm. What is the diameter?



Answer: _____

11. The diameter of a circle is 10 cm. Calculate the circumference. (π ≈ 3,14)

Answer: _____

12. The radius of a circle is 7 cm. Calculate the circumference. (π ≈ 3,14)

Answer: _____

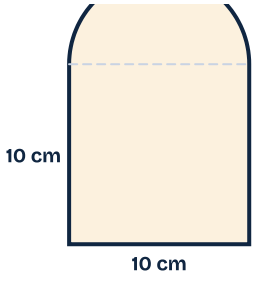
13. A bicycle wheel has a diameter of 50 cm. How far does the bicycle go when the wheel turns 100 times? Answer in metres.

Answer: _____

14. The circumference of a round tray is 62,8 cm. What is the diameter? (π ≈ 3,14)

Answer: _____

15. The figure is a square with a semicircle on top. Calculate the perimeter. (π ≈ 3,14)



Answer: _____

I got _____ **out of 15** ☆ ☆ ☆

Memo

Perimeter, circles and composite figures

Other correct methods are also right.

1. **40 cm**
P = 2 × (14 + 6) = 2 × 20 = 40 cm

2. **13 cm**
52 ÷ 4 = 13 cm

3. **45 cm**
6 × 7,5 = 45 cm

4. **a = 5 cm; b = 4 cm**
a = 12 – 7 = 5 cm; b = 9 – 5 = 4 cm

5. **42 cm**
7 + 4 + 5 + 5 + 12 + 9 = 42 cm (or 2 × (12 + 9))

6. **88 cm²**
12 × 9 – 5 × 4 = 108 – 20 = 88 cm²

7. **36 cm**
Missing sides: 4 cm and 3 cm. 6 + 3 + 4 + 5 + 10 + 8 = 36 cm

8. **68 cm²**
10 × 8 – 4 × 3 = 80 – 12 = 68 cm²

9. **R1 330**
P = 2 × (12 + 7) = 38 m; 38 × R35 = R1 330

10. **9 cm**
d = 2 × r = 2 × 4,5 = 9 cm

11. **31,4 cm**
C = π × d = 3,14 × 10 = 31,4 cm

12. **43,96 cm**
d = 14 cm; C = 3,14 × 14 = 43,96 cm

13. **157 m**
One turn: 3,14 × 50 = 157 cm; 100 × 157 cm = 15 700 cm = 157 m

14. **20 cm**
d = C ÷ π = 62,8 ÷ 3,14 = 20 cm

15. **45,7 cm**
Three sides: 3 × 10 = 30 cm. Semicircle: 3,14 × 10 ÷ 2 = 15,7 cm. Together: 45,7 cm (the dotted line does not count)