

GCSE Maths Perimeter, Area and Circles (Higher): check-up and exam-style questions: worksheet

GCSE Maths - Perimeter, Area and Circles - Higher - Test yourself

Name: _____

Date: _____

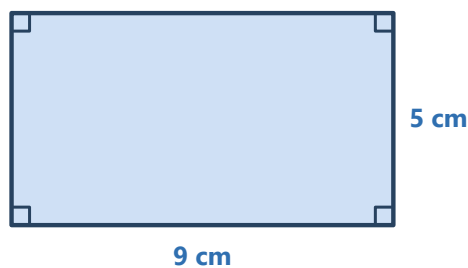
Score: _____

26 questions. Write your answers in the spaces. Answers and step-by-step help are free at websink.site/gcse/maths/ch18-perimeter-area-circles/higher/check-up-and-exam-style-questions/

Exercise 18Z Check-up (non-calculator)

Non-calculator

- 1 Work out (a) the area and (b) the perimeter of the rectangle.



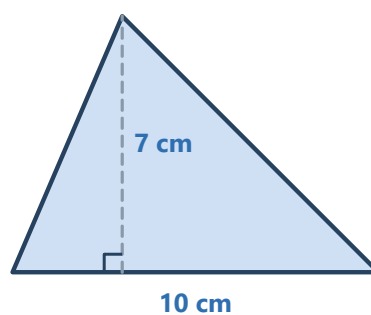
(a) area

Answer: _____

(b) perimeter

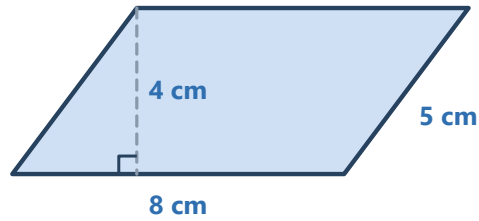
Answer: _____

- 2 Work out the area of the triangle.



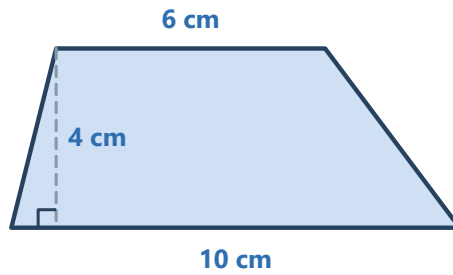
Answer: _____

- 3 Work out the area of the parallelogram.



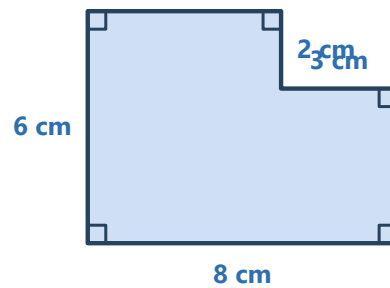
Answer:

- 4** Work out the area of the trapezium.



Answer:

- 5** Work out the area of the L-shape.

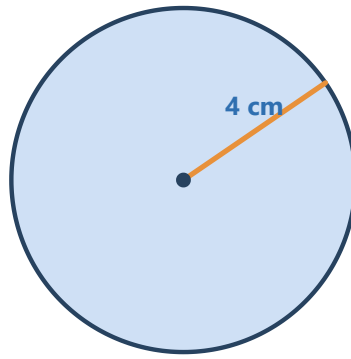


Answer:

- 6** Change 2.5 m^2 into cm^2 .

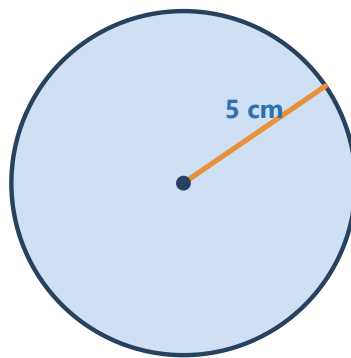
Answer:

- 7** Work out the circumference of the circle. Give your answer in terms of π .



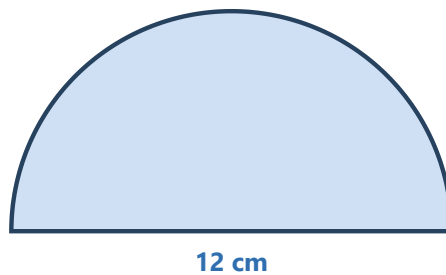
Answer:

- 8** Work out the area of the circle. Give your answer in terms of π .



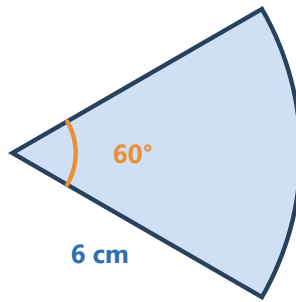
Answer:

- 9** Work out the perimeter of the semicircle. Give your answer in terms of π .



Answer:

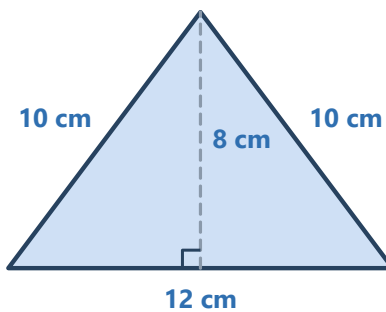
- 10** Work out the area of the sector. Give your answer in terms of π .



Answer:

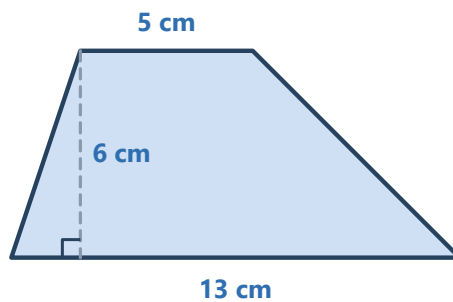
Exercise 18X Exam-style questions Non-calculator

- 1** The diagram shows a triangle. Work out the area of the triangle. [2 marks]



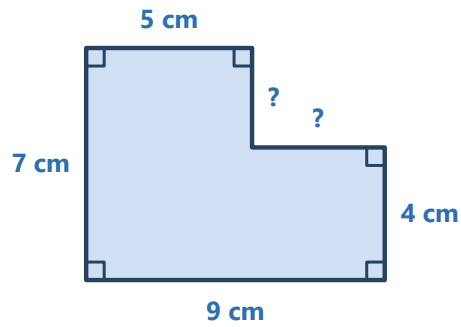
Answer:

- 2** Work out the area of the trapezium. [3 marks]



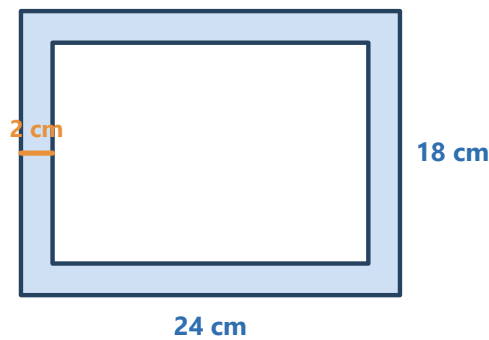
Answer:

- 3** Work out the perimeter of this shape. [3 marks]



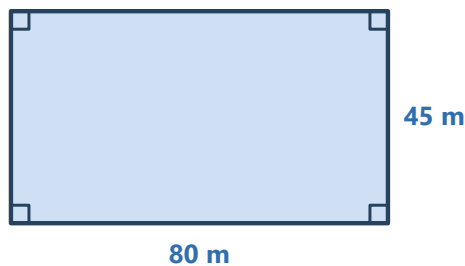
Answer:

- 4** A rectangular photo is 20 cm by 14 cm. It is put in a frame with a border 2 cm wide all the way round. Work out the area of the border. [3 marks]



Answer:

- 5** A farmer is fencing a rectangular field 80 m by 45 m all the way round. Fencing costs £5.50 per metre. Work out the total cost of the fencing. [3 marks]



Answer:

- 6** A wall is 7 m wide and 3 m high. It needs two coats of paint. One litre of paint covers 6 m^2 . Paint is sold in 2.5 litre tins at £16.80 each. Work out the cost of the paint. [4 marks]



Answer:

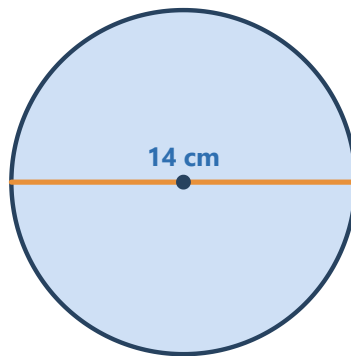
- 7** Change 0.35 m^2 into cm^2 .

[2 marks]

Answer:

- 8** The diameter of a circle is 14 cm. Work out the circumference. Give your answer in terms of π .

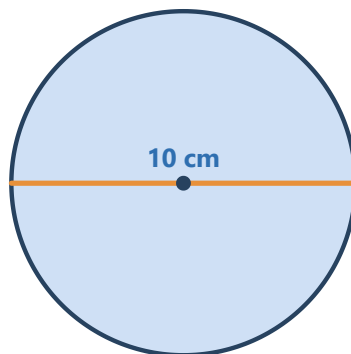
[2 marks]



Answer:

- 9** Work out the area of the circle. Give your answer to 1 decimal place.

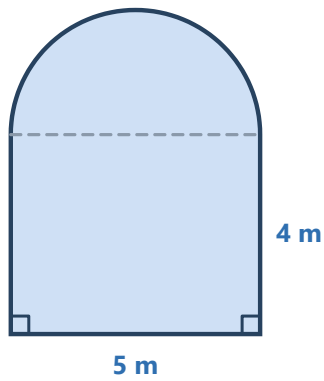
[3 marks]



Answer:

- 10** The diagram shows a window made from a rectangle and a semicircle. Work out (a) the area and (b) the perimeter of the window. Give both answers to 1 decimal place.

[5 marks]



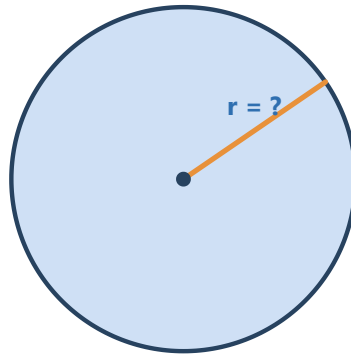
(a) area (2 marks)

Answer:

(b) perimeter (3 marks)

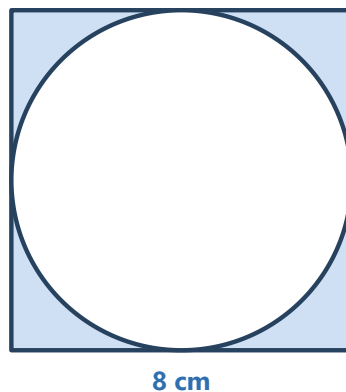
Answer:

- 11** The circumference of a circle is 40 cm. Work out the radius. Give your answer to 1 decimal place. [3 marks]



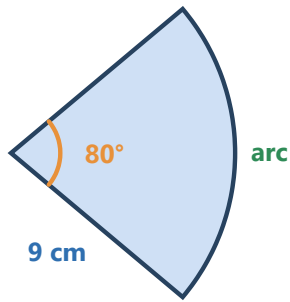
Answer:

- 12** A circle just touches all four sides of a square of side 8 cm. Work out the area of the shaded corners. Give your answer in terms of π . [4 marks]



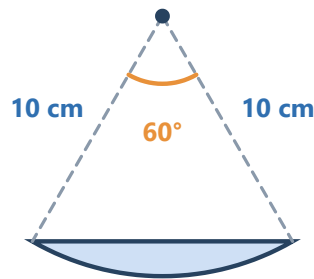
Answer:

- 13** The diagram shows a sector of a circle with radius 9 cm. Work out the arc length of the sector. Give your answer to 1 decimal place. [3 marks]



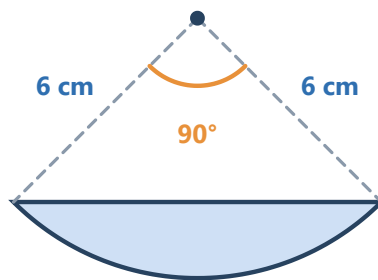
Answer:

- 14** The diagram shows a segment of a circle of radius 10 cm. The angle at the centre is 60° . Work out the area of the shaded segment. Give your answer to 2 decimal places. [4 marks]



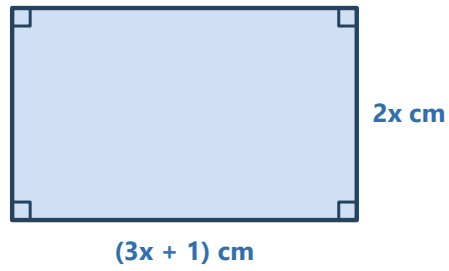
Answer:

- 15** The diagram shows a segment of a circle of radius 6 cm. The angle at the centre is 90° . Work out the exact area of the segment in terms of π . [4 marks]



Answer:

- 16** A rectangle has length $(3x + 1)$ cm and width $2x$ cm. The perimeter of the rectangle is 42 cm. Work out the area of the rectangle. [4 marks]



Answer:

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