

GCSE Maths: Area of triangles and parallelograms (Foundation): worksheet

GCSE Maths - Perimeter, Area and Circles - Foundation - Lesson 18.2

Name: _____

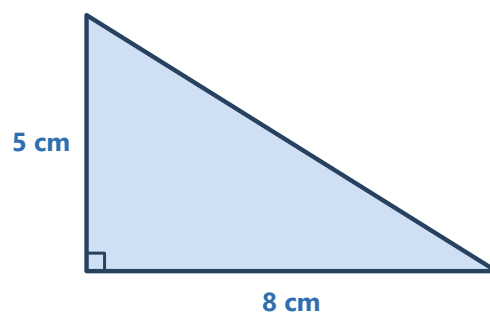
Date: _____

Score: _____

17 questions. Write your answers in the spaces. Answers and step-by-step help are free at websink.site/gcse/maths/ch18-perimeter-area-circles/foundation/area-of-triangles-and-parallelograms/

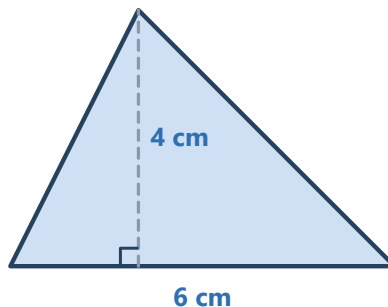
Exercise 18B Triangles and parallelograms Non-calculator

- 1 Work out the area of this right-angled triangle.



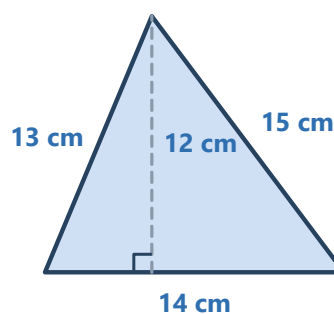
Answer: _____

- 2 Work out the area of a triangle with base 6 cm and perpendicular height 4 cm.



Answer: _____

- 3 Work out (a) the area and (b) the perimeter of this triangle.



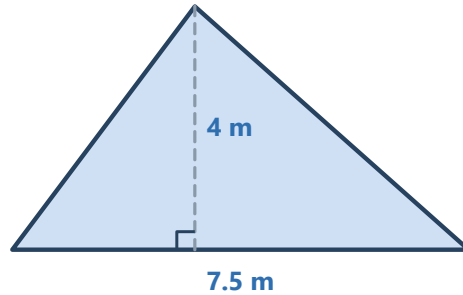
(a) area

Answer:

(b) perimeter

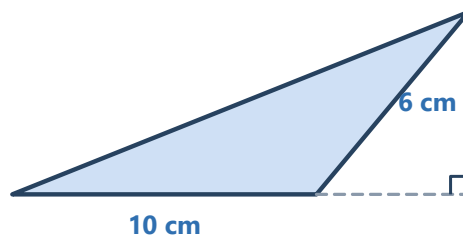
Answer:

4 Work out the area of this triangle.



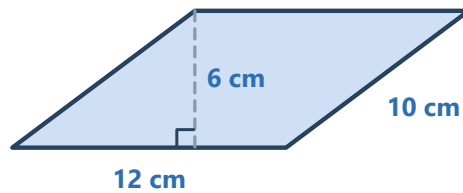
Answer:

5 Work out the area of this triangle. The perpendicular height is outside the triangle.



Answer:

6 Work out (a) the area and (b) the perimeter of this parallelogram.



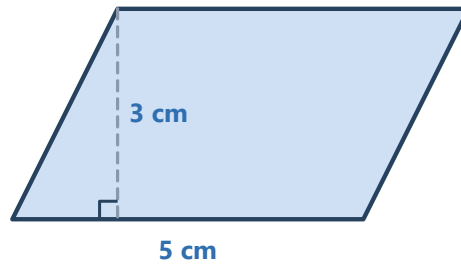
(a) area

Answer:

(b) perimeter

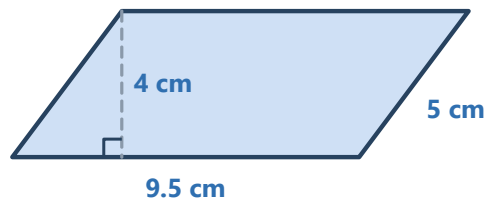
Answer:

7 Work out the area of a parallelogram with base 5 cm and perpendicular height 3 cm.



Answer:

- 8** Work out (a) the area and (b) the perimeter of this parallelogram.



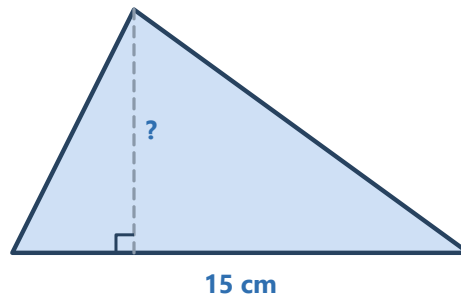
- (a)** area

Answer:

- (b)** perimeter

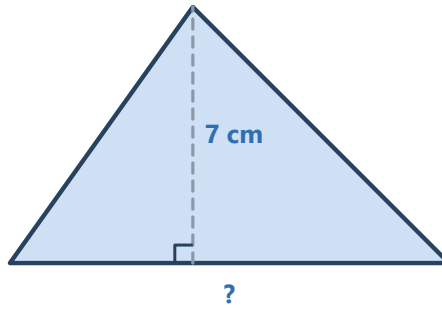
Answer:

- 9** The area of this triangle is 60 cm^2 . Work out the perpendicular height.



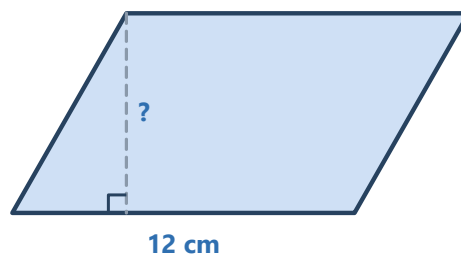
Answer:

- 10** The area of this triangle is 42 cm^2 . Work out the length of the base.



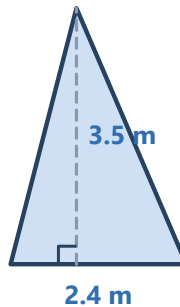
Answer:

- 11** The area of this parallelogram is 84 cm^2 . Work out its perpendicular height.



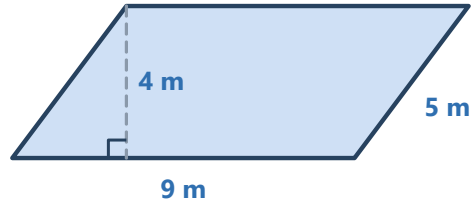
Answer:

- 12** A sail is a triangle with base 2.4 m and perpendicular height 3.5 m . Sailcloth costs $\text{£}18$ per square metre. Work out the cost of the cloth for one sail.



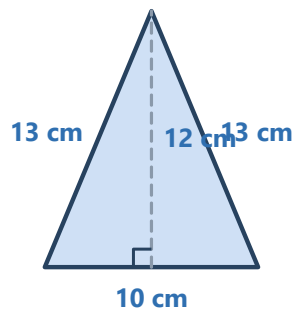
Answer:

- 13** A flower bed is a parallelogram with base 9 m and perpendicular height 4 m . One bag of compost covers 5 m^2 . How many bags are needed to cover the whole bed?



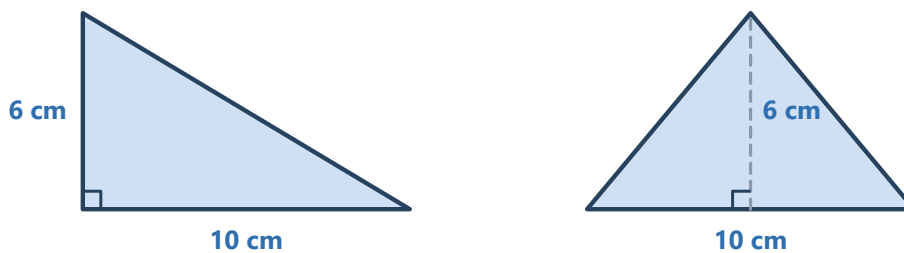
Answer:

- 14** Ravi says: "The area of this triangle is $\frac{1}{2} \times 10 \times 13 = 65 \text{ cm}^2$." Explain his mistake and work out the correct area.



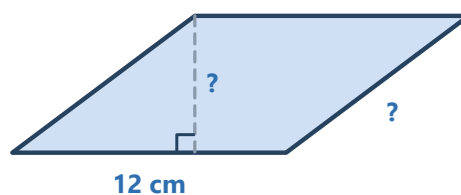
Answer:

- 15** Triangle A and triangle B both have a base of 10 cm and a perpendicular height of 6 cm. Zara says they must have the same area. Is she correct? Show your working.



Answer:

- 16** A parallelogram has base 12 cm and area 72 cm^2 . Its perimeter is 44 cm. Work out (a) its perpendicular height, (b) the length of a slanting side.



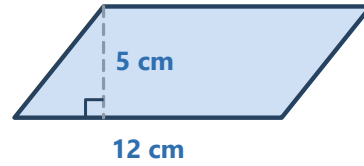
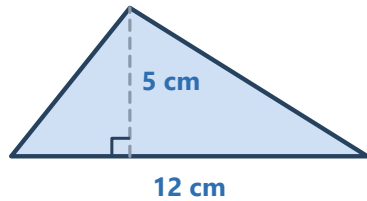
(a) height

Answer: _____

(b) slanting side

Answer: _____

- 17** A triangle has base 12 cm. A parallelogram has the same base and the same perpendicular height, 5 cm. Show that the area of the parallelogram is double the area of the triangle.



Answer: _____