

Topic Test 1 (20 minutes)

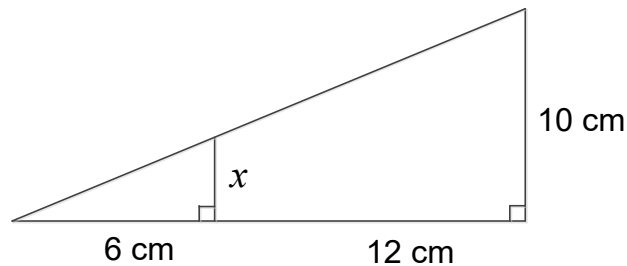
Congruence and similarity - Higher

- 1 Which of these is **not** a condition for congruent triangles?
Circle the correct answer.

[1 mark]

SSS AAA ASA RHS

2



Not drawn accurately

Work out the length x .

[2 marks]

Answer _____ cm

- 3 The edges of a cube are all doubled in size.

How many times bigger is the new volume?

Circle the correct answer.

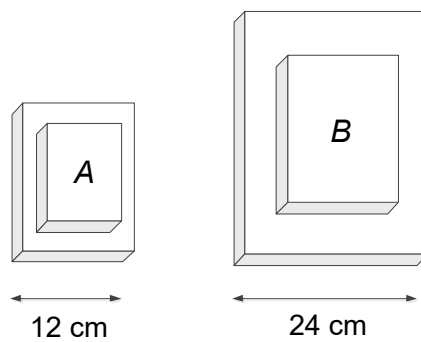
[1 mark]

2 4 6 8

4 Explain why it is not possible to have a triangle with two obtuse angles.

[1 marks]

5 The solids *A* and *B* are similar.



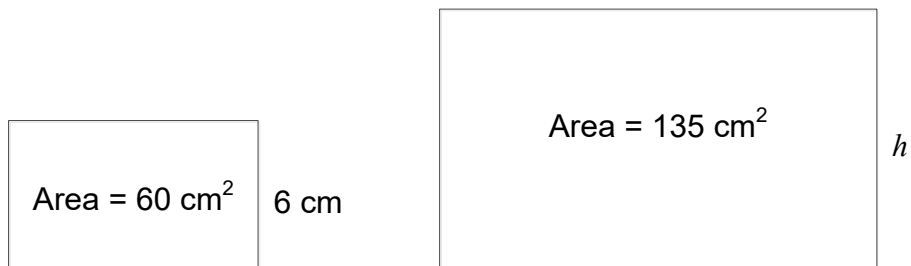
The volume of solid *A* is 432 cm^3 .

Work out the volume of solid *B*.

[3 marks]

Answer _____ cm^3

6 These two rectangles are similar.

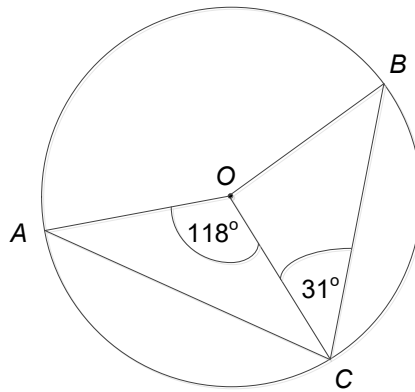


Work out the length h .

[3 marks]

Answer _____ cm

7 O is the centre of the circle.



Not drawn accurately

Prove that triangles *OAC* and *OBC* are congruent.

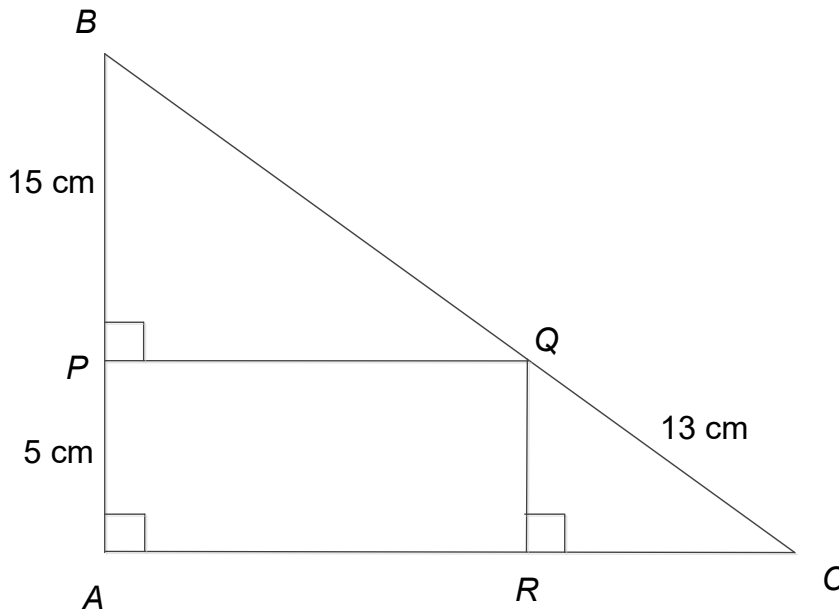
[4 marks]

8 In the diagram, BQC is a straight line.

$$CQ = 13 \text{ cm}$$

$$AP = 5 \text{ cm}$$

$$BP = 15 \text{ cm}$$



Not drawn accurately

Work out the area of rectangle $APQR$.

[5 marks]

Answer _____ cm^2