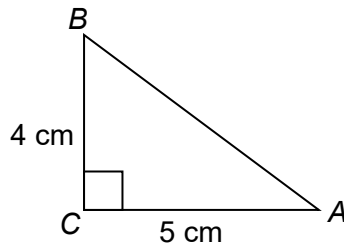


Topic Test 1 (20 minutes)

Trigonometry recap and extension - Higher

1 What is the value of $\sin A$ for this triangle?



Not drawn accurately

Circle your answer.

[1 mark]

$\frac{4}{5}$

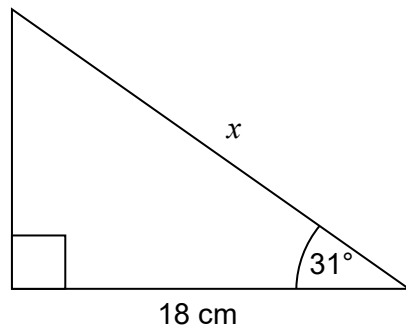
$\frac{4}{\sqrt{41}}$

$\frac{4}{9}$

$\frac{5}{\sqrt{41}}$

2 Work out the length x .

[2 marks]

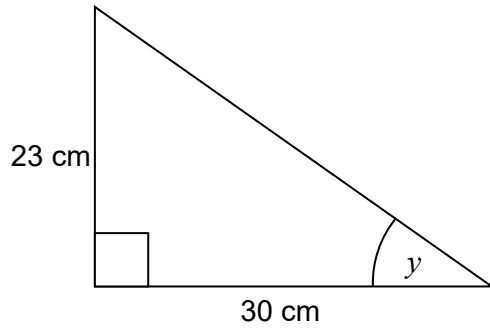


Not drawn accurately

Answer _____ cm

3 Work out the size of angle y .

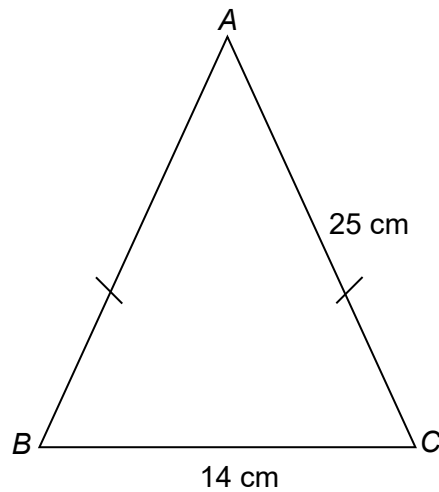
[2 marks]



Not drawn accurately

Answer _____ degrees

4 $AB = AC$



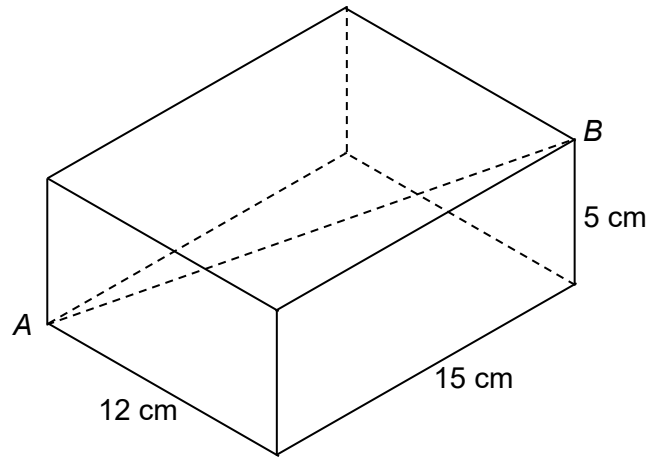
Not drawn accurately

Work out the area of triangle ABC.

[4 marks]

Answer _____ cm^2

- 5 Work out the length of the diagonal AB of a cuboid with dimensions 5 cm, 12 cm and 15 cm

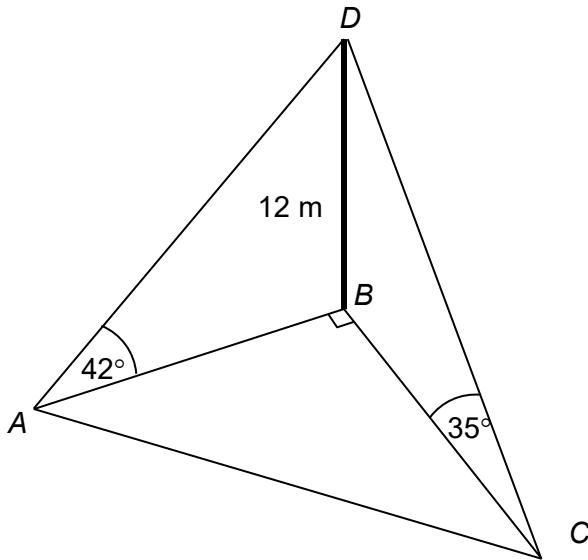


[3 marks]

Answer _____ cm

- 6 ABC is a right-angled triangle on level ground.
 DB is a vertical mast of height 12 metres.

The angle of elevation from A to D is 42°
The angle of elevation from C to D is 35°

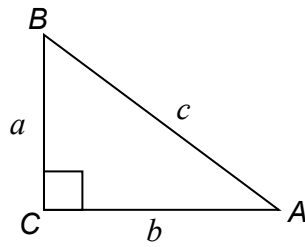


Work out the distance AC .

[5 marks]

Answer _____ m

7 ABC is a right-angled triangle.



Use trigonometry and Pythagoras' theorem to show that

$$\sin^2 A + \cos^2 A = 1$$

Note that $\sin^2 A$ is the mathematical way of writing $(\sin A)^2$

[3 marks]
