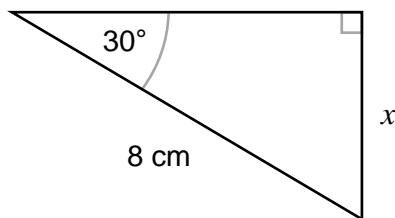


- 15 Use trigonometry to work out the value of x .



Not drawn accurately

[2 marks]

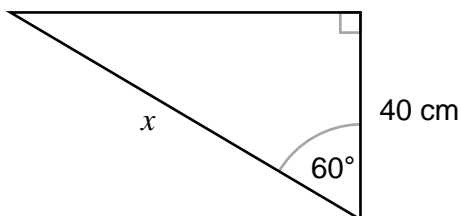
$$\sin(30) = \frac{x}{8}$$

$$\frac{1}{2} = \frac{x}{8}$$

$$x = 4$$

Answer 4 cm

- 16 Use trigonometry to work out the value of x .



Not drawn accurately

[2 marks]

$$\cos(60) = \frac{40}{x}$$

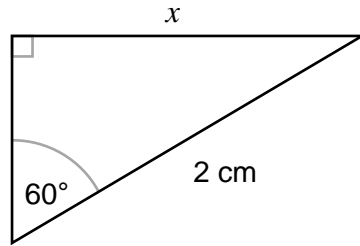
$$\frac{1}{2} = \frac{40}{x}$$

$$x = 80$$

Answer 80 cm



17 Use trigonometry to work out the value of x .



Not drawn accurately

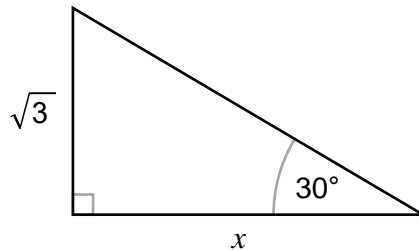
[2 marks]

$$\sin(60) = \frac{x}{2}$$

$$\frac{\sqrt{3}}{2} = \frac{x}{2}$$

Answer $\sqrt{3}$ cm

18 Use trigonometry to work out the value of x .



Not drawn accurately

[2 marks]

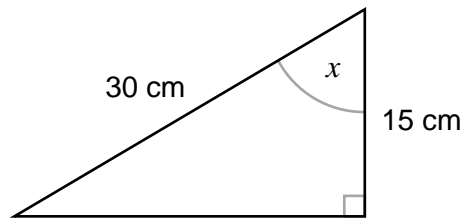
$$\tan(30) = \frac{\sqrt{3}}{x}$$

$$\sqrt{3} = \frac{\sqrt{3}}{x}$$

Answer 1 cm



19

Use trigonometry to work out the size of angle x .

Not drawn accurately

[2 marks]

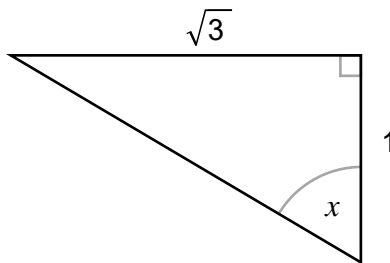
$$\cos(x) = \frac{15}{30}$$

$$\cos(x) = \frac{1}{2}$$

$$\cos(60) = \frac{1}{2}$$

Answer 60 °

20

Use trigonometry to work out the size of angle x .

Not drawn accurately

[2 marks]

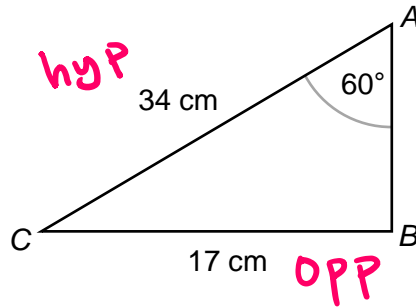
$$\tan(x) = \frac{\sqrt{3}}{1}$$

$$\tan(x) = \sqrt{3}$$

$$\tan(60) = \sqrt{3}$$

Answer 60 °

21

Here is triangle ABC .

Not drawn accurately

Is angle ABC a right angle?

Tick one box.

Yes No Not possible to tell

Show working to support your answer.

[2 marks]

$$\text{If yes then } \sin(60) = \frac{17}{34}$$

$$\text{but } \sin(60) = \frac{\sqrt{3}}{2} \text{ and } \frac{17}{34} = \frac{1}{2}$$

$$\frac{\sqrt{3}}{2} \neq \frac{17}{34} \text{ so } \underline{\underline{\text{NO}}}$$

