



Exact Trig Values



REVISE THIS TOPIC

1 Write down the value of $\sin 30^\circ$

$\frac{1}{2}$

(Total for Question 1 is 1 mark)

2 Write down the value of $\cos 0^\circ$

1

(Total for Question 2 is 1 mark)

3 Write down the value of $\tan 45^\circ$

1

(Total for Question 3 is 1 mark)

4 Write down the value of $\sin 60^\circ$

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

(Total for Question 4 is 1 mark)

5 Write down the value of $\cos 30^\circ$

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

(Total for Question 5 is 1 mark)

6 Write down the value of $\tan 0^\circ$

0

(Total for Question 6 is 1 mark)

7 Write down the value of $\sin 0^\circ$

0

(Total for Question 7 is 1 mark)



For the entire booklet



8 Write down the value of $\cos 60^\circ$

$\frac{1}{2}$

(Total for Question 8 is 1 mark)

9 Write down the value of $\tan 60^\circ$

$\sqrt{3}$

(Total for Question 9 is 1 mark)

10 Write down the value of $\sin 90^\circ$

1

(Total for Question 10 is 1 mark)

11 Write down the value of $\cos 90^\circ$

0

(Total for Question 11 is 1 mark)

12 Write down the value of $\tan 30^\circ$

$\frac{\sqrt{3}}{3}$

(Total for Question 12 is 1 mark)

13 Write down the value of $\sin 45^\circ$

$\frac{\sqrt{2}}{2}$

(Total for Question 13 is 1 mark)

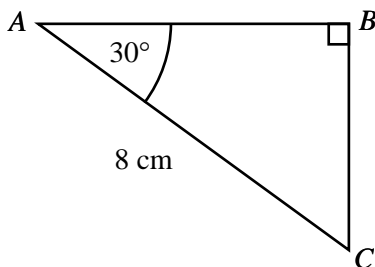
14 Write down the value of $\cos 45^\circ$

$\frac{\sqrt{2}}{2}$

(Total for Question 14 is 1 mark)



15 ABC is a right-angled triangle.



Calculate the length of BC .

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

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

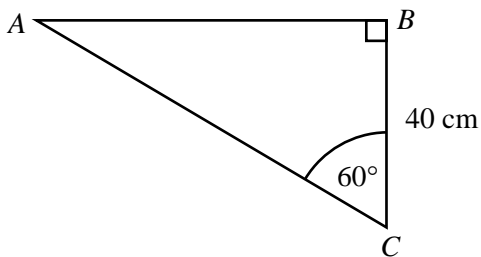
$$x = 4$$

4

..... cm

(Total for Question 15 is 2 marks)

16 ABC is a right-angled triangle.



Calculate the length of AC .

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

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

$$x = 80$$

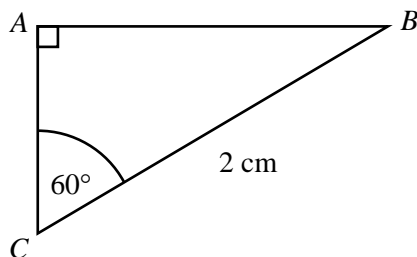
80

..... cm

(Total for Question 16 is 2 marks)



17 ABC is a right-angled triangle.



Calculate the length of AB .

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

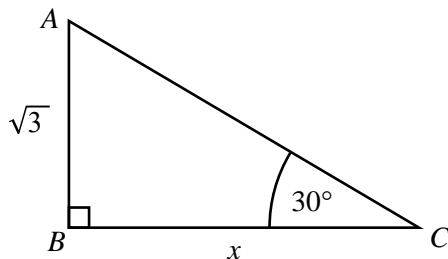
$$\frac{\sqrt{3}}{2} = \frac{x}{2}$$

$\sqrt{3}$

..... cm

(Total for Question 17 is 2 marks)

18 ABC is a right-angled triangle.



Calculate the length of BC .

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

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

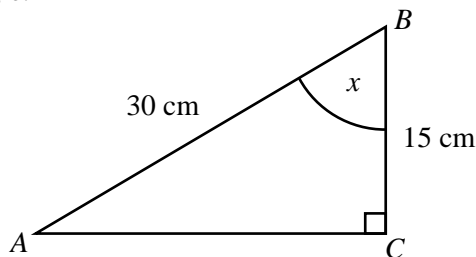
1

..... cm

(Total for Question 18 is 2 marks)



19 ABC is a right-angled triangle.



Work out the size of the angle marked x .

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

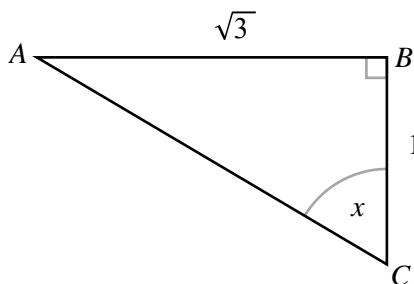
$$\cos(x) = \frac{1}{2}$$

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

60

(Total for Question 19 is 2 marks)

20 ABC is a right-angled triangle.



Work out the size of the angle marked x .

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

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

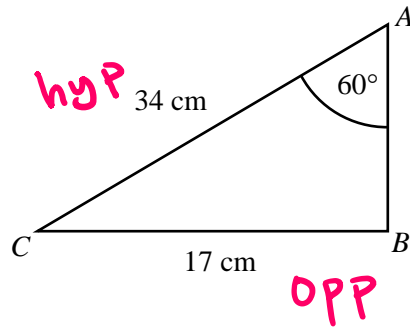
$$\tan(60) = \sqrt{3}$$

60

(Total for Question 20 is 2 marks)



21 ABC is a triangle.



Not drawn accurately

Is angle ABC a right angle?

Tick one box.

Yes

No

Not possible to tell

Give a reason for your answer.

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

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

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

(Total for Question 21 is 2 marks)

