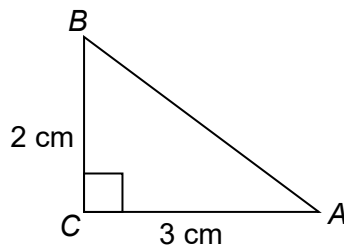


Topic Test 1 (20 minutes)

Introduction to trigonometry - Foundation

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



Not drawn accurately

Circle your answer.

[1 mark]

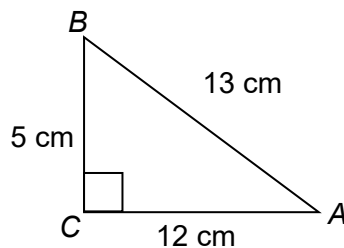
$$\frac{2}{3}$$

$$\frac{2}{5}$$

$$\frac{2}{\sqrt{13}}$$

$$\frac{3}{\sqrt{13}}$$

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



Not drawn accurately

Circle your answer.

[1 mark]

$$\frac{5}{12}$$

$$\frac{5}{13}$$

$$\frac{12}{13}$$

$$\frac{13}{5}$$

3 (a) Use your calculator to work out $25 \cos 54^\circ$

Give your answer to 1 decimal place.

[1 mark]

Answer _____

3 (b) Use your calculator to work out $\frac{15}{\tan 32^\circ}$

Give your answer to the nearest whole number.

[1 mark]

Answer _____

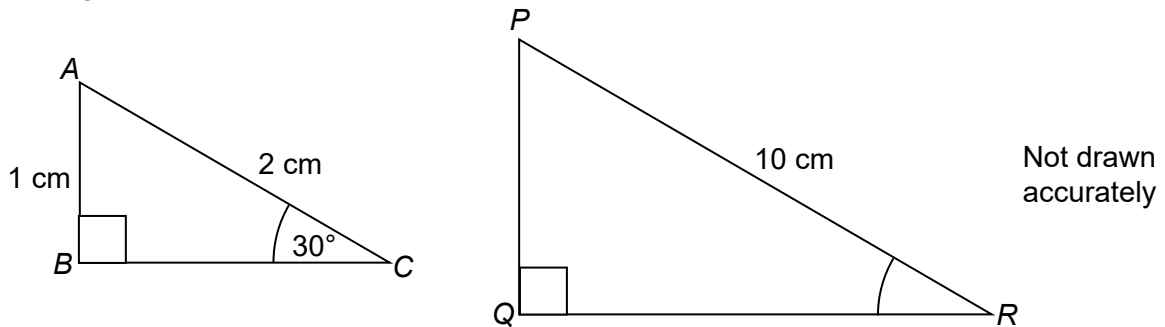
3(c) Use your calculator to work out $\tan^{-1}\left(\frac{18}{35}\right)$

Give your answer to 1 decimal place

[1 mark]

Answer _____ degrees

4 Triangles ABC and PQR are similar.



4 (a) Write down the size of angle BAC .

[1 mark]

Answer _____ degrees

4 (b) Write down the size of angle PRQ .

[1 mark]

Answer _____ degrees

4 (c) Use Pythagoras' theorem to work out the length BC .
Give your answer as an exact value.

[2 marks]

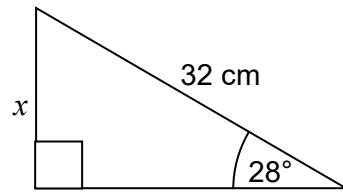
Answer _____ cm

4 (d) Work out the length of QR .
Give your answer as an exact value.

[1 mark]

Answer _____ cm

5



Not drawn accurately

Which of the following gives the length x in centimetres?
Circle your answer.

[1 mark]

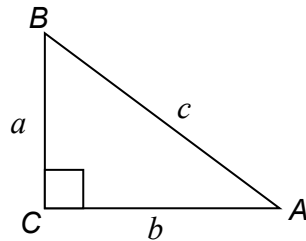
$32 \times \sin 28^\circ$

$28 \times \sin 32^\circ$

$32 \times \cos 28^\circ$

$28 \times \cos 32^\circ$

6 For this triangle, which of the following is **not** true?



Circle your answer.

[1 mark]

$\tan A = \frac{b}{a}$

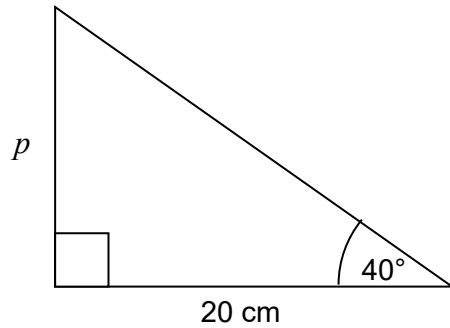
$\sin B = \frac{b}{c}$

$\sin A = \frac{a}{c}$

$\cos A = \frac{b}{c}$

7 Work out the length p .

[2 marks]

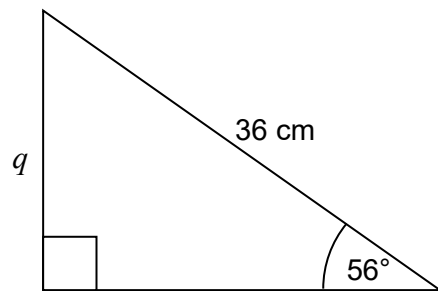


Not drawn accurately

Answer _____ cm

8 Work out the length q .

[2 marks]

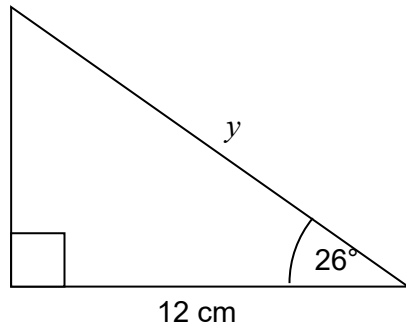


Not drawn accurately

Answer _____ cm

9 Work out the length y .

[2 marks]

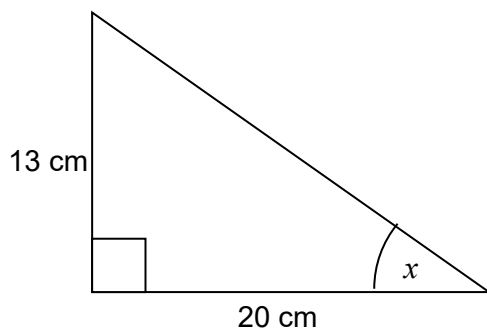


Not drawn accurately

Answer _____ cm

10 Work out the size of angle x .

[2 marks]



Not drawn accurately

Answer _____ degrees