

Trigonometry - Maths key

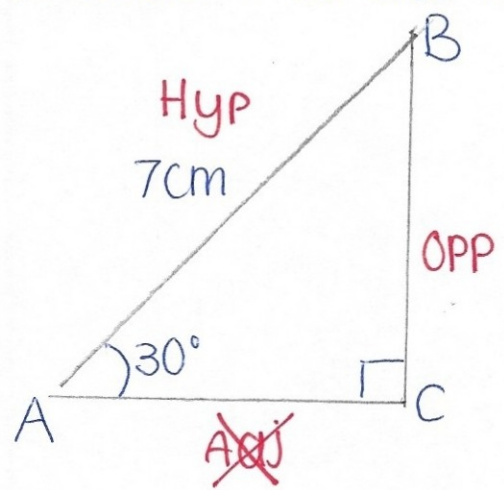
— = working out
— = Answer

When is it used?

- Calculate the lengths of sides and sizes of angles in right-angled triangles.

Finding missing length. - (you must be given a side length and an angle - not including the right angle)

Question - Find the length of the side BC.



Method

- 1) Label sides 'opp', 'adj' or 'hyp'
- 2) cross out side which doesn't provide any info to work out the answer
- 3) identify if you are using the 'SOH', 'CAH' or 'TOA' formula.
- 4) Draw out the relevant formula triangle
- 5) Substitute correct values into the formula

SOH CAH TOA

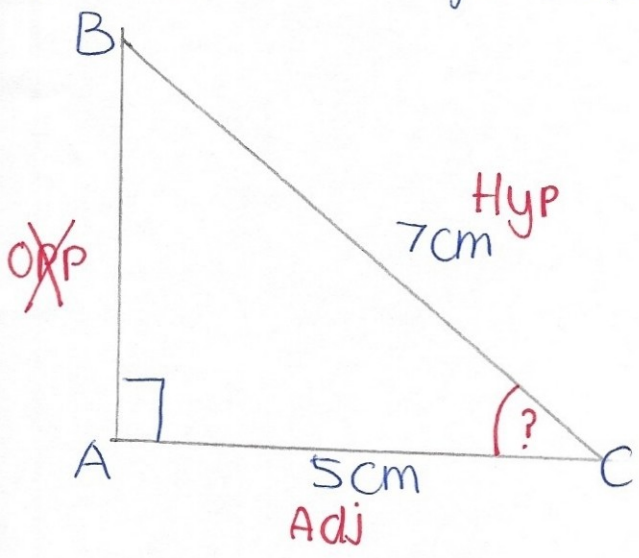


$$\text{OPP} = \sin(30) \times 7$$

$$= 3.5 \text{ cm}$$

Finding missing Angles using trigonometry

Question - Find angle C. Give your answer correct to 1dp.



SOH CAH TOA



$$\theta = \cos^{-1}\left(\frac{5}{7}\right)$$

$$= 44.4^\circ$$

When working at an angle, always use the 2nd function button on Calculator.

Adj value
hyp value