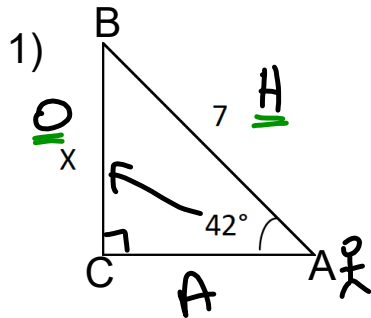


Finding a Missing Side using Sin, Cos, Tan

Steps:

1. Label sides O,A,H
2. Choose SOH, CAH, TOA
3. Solve

Examples: Solve for x SOH CAH TOA

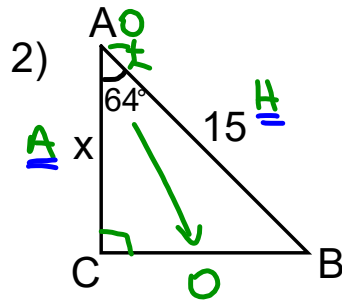


$$\sin A = \frac{O}{H}$$

$$\sin 42^\circ = \frac{x}{7}$$

$$x = 7 \cdot \sin 42$$

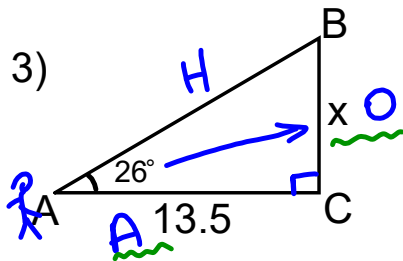
$$= 4.68 \text{ u}$$



$$\cos A = \frac{A}{H}$$

$$\cos 64^\circ = \frac{x}{15}$$

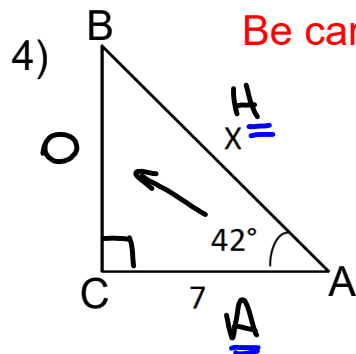
$$x = 6.58 \text{ u}$$



$$\tan A = \frac{O}{A}$$

$$\tan 26^\circ = \frac{x}{13.5}$$

$$x = 6.58 \text{ u}$$



Be careful here!!!

$$\cos A = \frac{A}{H}$$

$$\cos 42^\circ = \frac{7}{x} \quad \text{*SWAP}$$

$$x = \frac{7}{\cos 42^\circ}$$

$$x = 9.42 \text{ u}$$