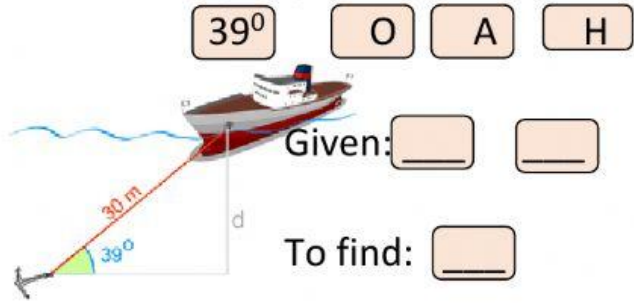


Solving for a side using trigonometric ratios

1. Find the depth (d) of the anchor



SOH CAH TOA  
 sine cosine tangent

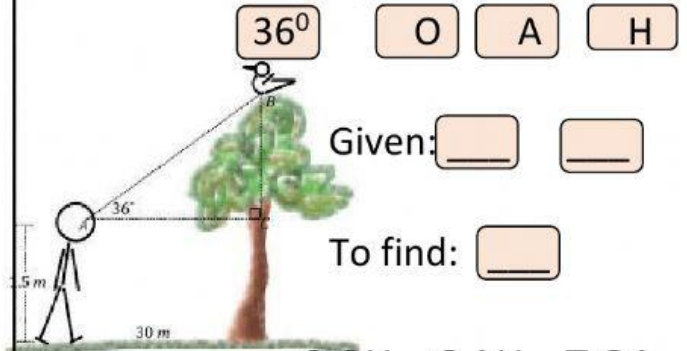
We use  ratio.

sin cos tan sin cos tan

$$\sin(39^\circ) = \frac{d}{30 \text{ m}}$$

$$d = 30 \times \sin(39^\circ) = 18$$

2. Find the height (h) of the tree crown



SOH CAH TOA  
 sine cosine tangent

We use  ratio.

sin cos tan sin cos tan

$$\tan(36^\circ) = \frac{h}{30 \text{ m}}$$

$$h = 30 \times \tan(36^\circ) = 21$$