

Let's give our noodles a warm-up.

Make these statements true by adding one straight line.

$$10 \text{ TO } 10 = 950$$

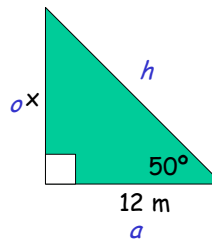
$$5 \text{ † } 5 + 5 = 550$$

Using Trigonometry to Solve for a Side.

Ex. Solve for the unknown.

Steps:

1. Label the sides (h, o, a).
2. Pick the ratio that solves the side we are trying to find and uses the side we are given.



Tangent

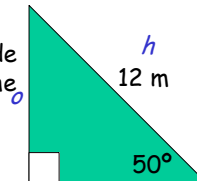
3. Setup the equation. $\tan 50^\circ = \frac{x}{12}$

4. Using your calculator, solve the equation. $\frac{x}{12} = 1.192$
 $x = 1.192 \times 12$
 $x = 14.3 \text{ m}$

Ex. Solve for the unknown side.

Steps:

1. Label the sides (h, o, a).
2. Pick the ratio that solves the side we are trying to find and uses the side we are given.



cosine

3. Setup the equation. $\frac{x}{12} = \cos 50^\circ$

4. Using your calculator, solve the equation.

$$\frac{x}{12} = 0.643$$
$$x = 0.643 \times 12$$
$$x = 7.7 \text{ m}$$