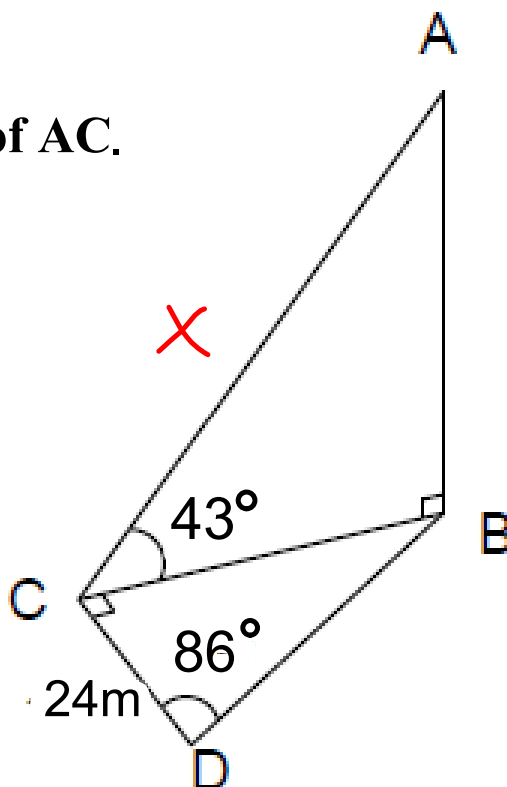
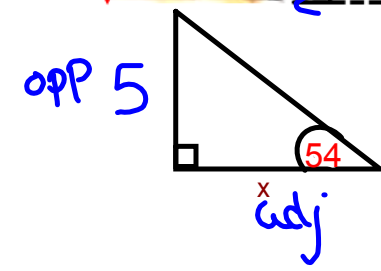
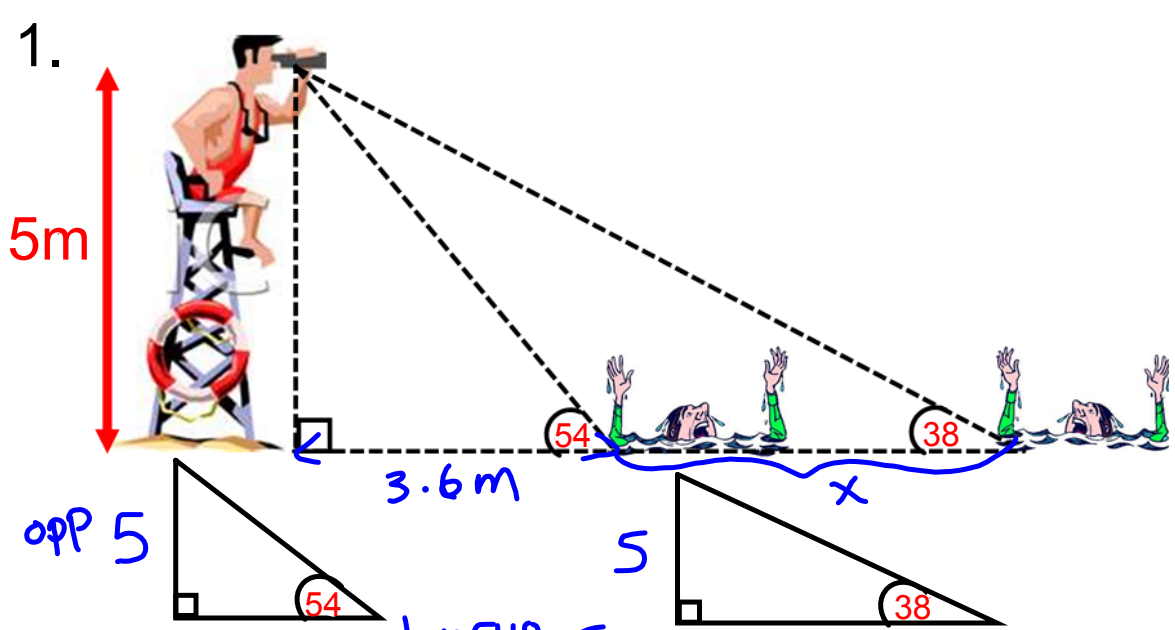


Warm Up Questions

1. From his line of sight 5m high, a life guard sees two people in distress. The angles of depression to the individuals are 54 and 38 degrees respectively. What is the distance between the two people in distress?

2. Find the length of AC.



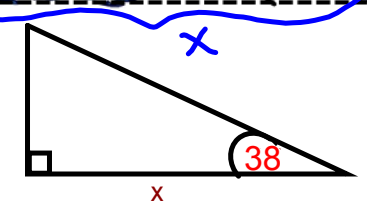


$$\tan 54^\circ = \frac{5}{x}$$

$$\frac{1.3764}{1} = \frac{5}{x}$$

$$\frac{1.3764x}{1.3764} = \frac{5}{1.3764}$$

$$x = 3.6m$$



$$\tan 38^\circ = \frac{5}{x}$$

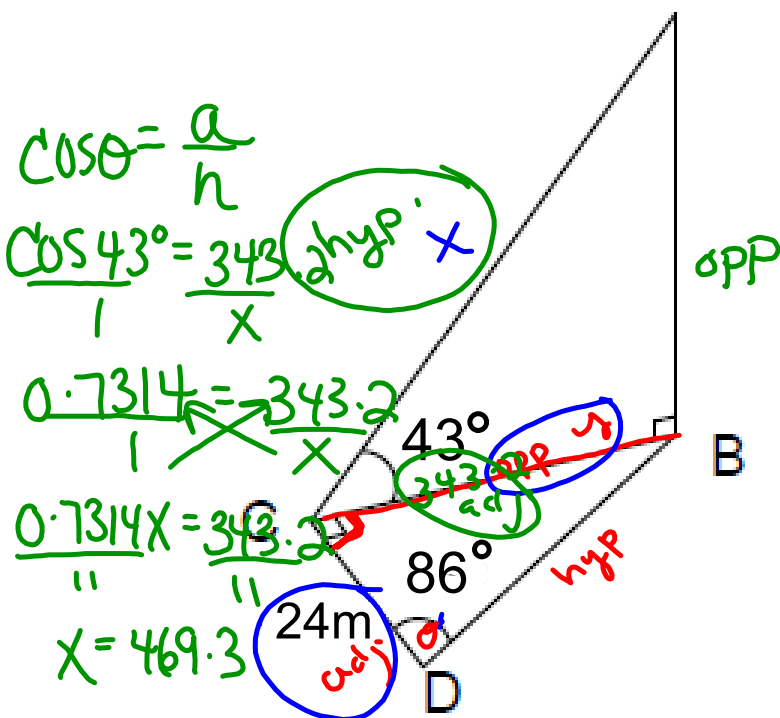
$$\frac{0.7813}{1} = \frac{5}{x}$$

$$\frac{0.7813x}{0.7813} = \frac{5}{0.7813}$$

$$x = 6.4$$

$$\begin{array}{r} 6.4 \\ - 3.6 \\ \hline 2.8m \end{array}$$

2. Find the length of AC.



$\tan \theta = \frac{o}{a}$
 $\tan 86^\circ = \frac{y}{24}$
 $14.3 = \frac{y}{24}$
 $y = 343.2$