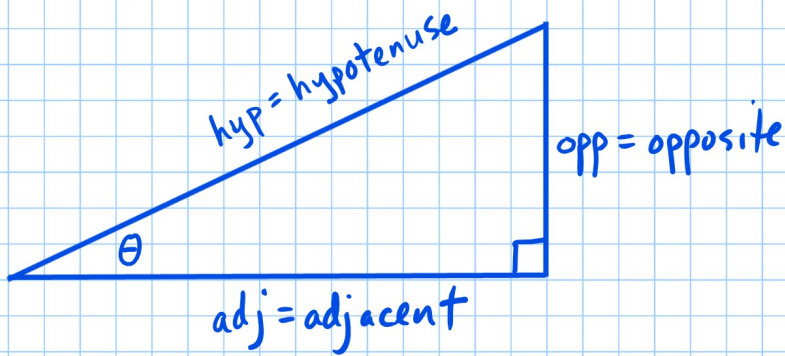


REVIEW OF BASIC TRIG



To find a missing side length

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

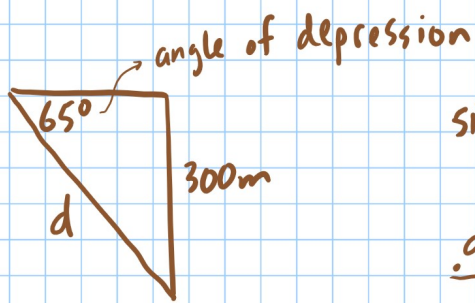
$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

To find missing angle

$$\theta = \sin^{-1} \left(\frac{\text{opp}}{\text{hyp}} \right)$$

$$\theta = \cos^{-1} \left(\frac{\text{adj}}{\text{hyp}} \right)$$

$$\theta = \tan^{-1} \left(\frac{\text{opp}}{\text{adj}} \right)$$

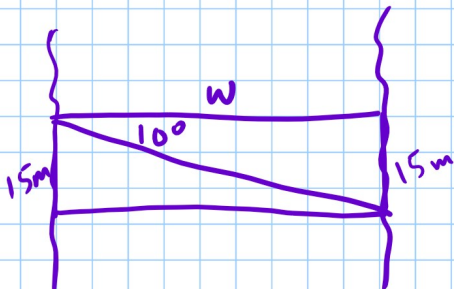


$$\sin 65^\circ = \frac{300}{d}$$

$$\frac{.9063}{1} = \frac{300}{d}$$

$$.9063d = 300$$

$$d = 331 \text{ m}$$



$$\tan 10^\circ = \frac{15}{w}$$

$$\frac{0.1763}{1} = \frac{15}{w}$$

$$0.1763w = 15$$

$$w = 85 \text{ m}$$



$$\theta = \sin^{-1}\left(\frac{28}{90}\right) = 18.1^\circ$$