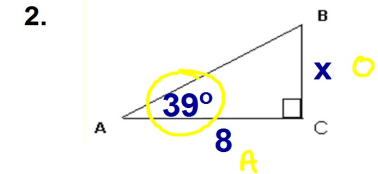
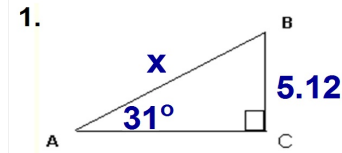


Finding Side Measures... Something to Remember!!

$$\sin 40^\circ = \frac{X}{12} \quad \text{If "x" flies High... Multiply}$$

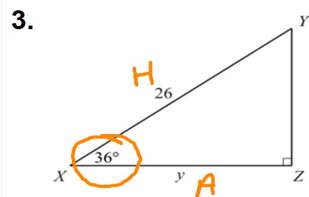
$$\sin 40^\circ = \frac{8.94}{X} \quad \text{If "x" is on the bottom... Swapp 'm}$$

Finding Missing Sides using Trig Ratios: Soh Cah Toa

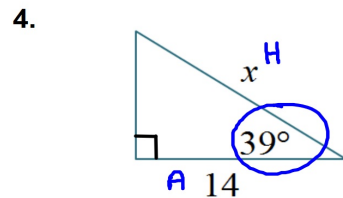


$$\begin{aligned} \tan \theta &= \frac{\text{opp}}{\text{adj}} \\ \tan 39^\circ &= \frac{x}{8} \\ x &= 8 \tan(39) \\ x &= 6.478 \end{aligned}$$

Finding Missing Sides using Trig Ratios: Soh Cah Toa

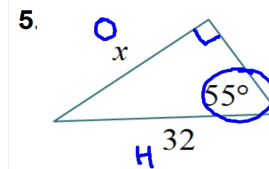


$$\begin{aligned} \cos \theta &= \frac{\text{Adj}}{\text{Hyp}} \\ \cos 36^\circ &= \frac{y}{26} \\ y &= 26 \cos(36) \\ y &= 21.03 \end{aligned}$$

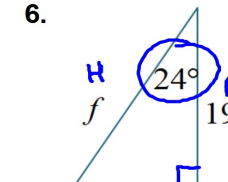


$$\begin{aligned} \cos \theta &= \frac{\text{Adj}}{\text{Hyp}} \\ \cos 39^\circ &= \frac{14}{x} \\ x &= \frac{14}{\cos 39} = 18.01 \end{aligned}$$

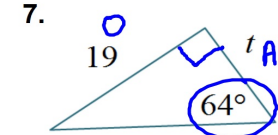
You Practice: Finding Missing Sides using Trig Ratios



$$\begin{aligned} \sin \theta &= \frac{\text{opp}}{\text{hyp}} \\ \sin 55^\circ &= \frac{x}{32} \\ x &= 32 \sin(55) \\ x &= 26.21 \end{aligned}$$



$$\begin{aligned} \cos \theta &= \frac{\text{Adj}}{\text{Hyp}} \\ \cos 24^\circ &= \frac{19}{f} \\ f &= \frac{19}{\cos 24} \\ f &= 20.798 \end{aligned}$$



$$\begin{aligned} \tan \theta &= \frac{\text{opp}}{\text{adj}} \\ \tan 64^\circ &= \frac{t}{19} \\ t &= \frac{19}{\tan 64} \\ t &= 9.27 \end{aligned}$$