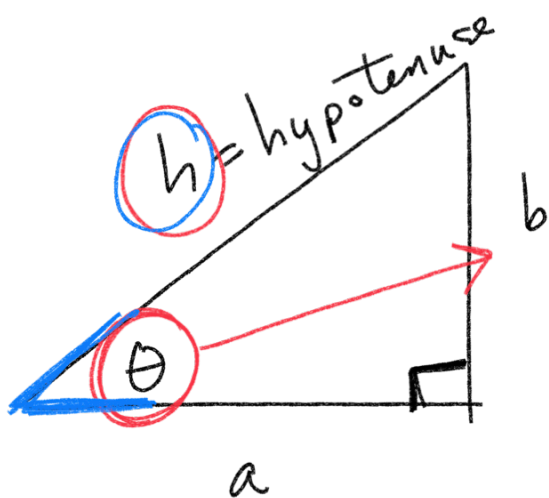


W-6 Geometry Week 31 5/10



$$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}} = \frac{b}{h}$$

$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}} = \frac{a}{h}$$

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}} = \frac{b}{a}$$

SOH

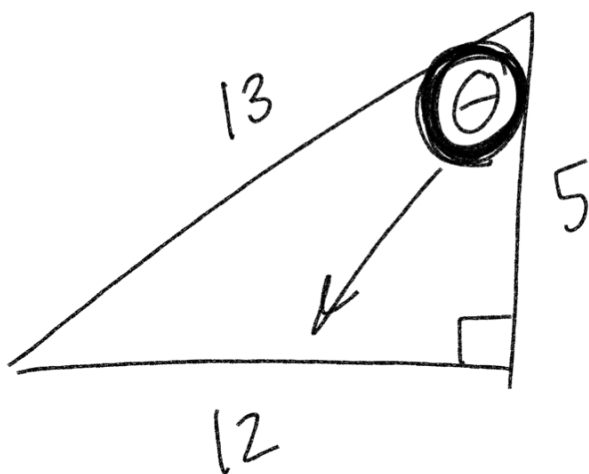
$$\text{Sine} = \frac{\text{opp}}{\text{hyp}}$$

CAH

$$\text{Cosine} = \frac{\text{adj}}{\text{hyp}}$$

TOA

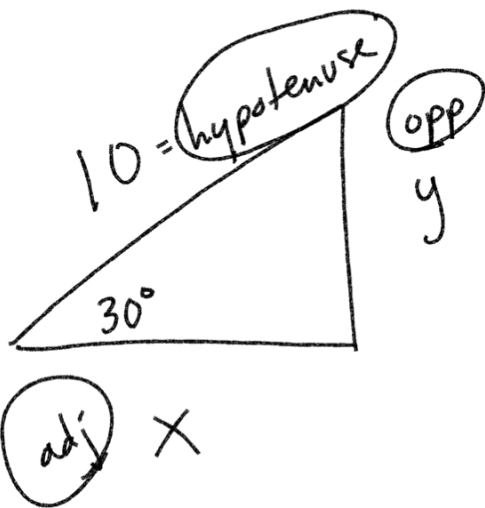
$$\text{tangent} = \frac{\text{opp}}{\text{adj}}$$



$$\sin \theta = \frac{5}{13}$$

$$\cos \theta = \frac{12}{13}$$

$$\tan \theta = \frac{5}{12}$$



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

$$10 (\cos 30^\circ) = \left(\frac{x}{10}\right) 10$$

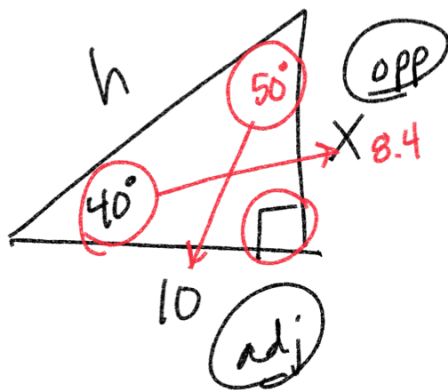
$$10 (\cos 30^\circ) = x = \boxed{8.66}$$

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

$$10 (\sin 30^\circ) = \left(\frac{y}{10}\right) 10$$

$$10 (\sin 30^\circ) = y = \boxed{5}$$

TOA



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

$$10 (\tan 40^\circ) = \left(\frac{x}{10}\right) 10$$

$$10 (\tan 40^\circ) = x$$

$$\boxed{8.4 = x}$$

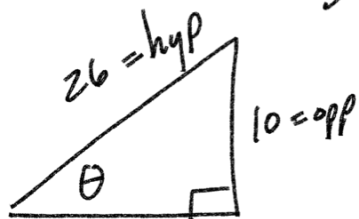
$$\cos 40^\circ = \frac{10}{h}$$

$$h = \frac{10}{\cos 40^\circ} = \boxed{13.05}$$

$$3 = \frac{12}{4}$$

$$4 = \frac{12}{3}$$

SOH



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

$$\sin \theta = \frac{10}{26}$$

$$\theta = \sin^{-1} \left( \frac{10}{26} \right) = \boxed{22.6^\circ}$$

