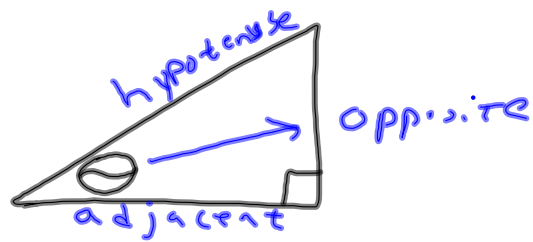
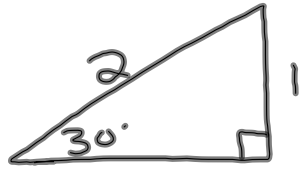


3-5-14
1st Geo



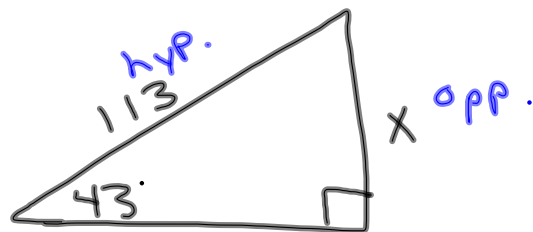
SOH CAH TOA

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

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

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

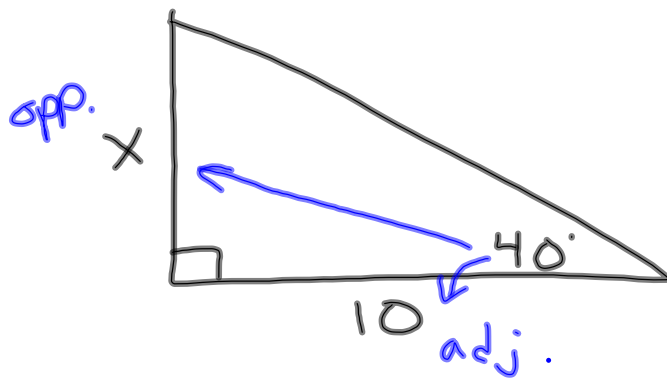
Example:



$$\frac{\sin 43^\circ}{1} = \frac{x}{113}$$

$$x = 113 \cdot \sin 43^\circ$$

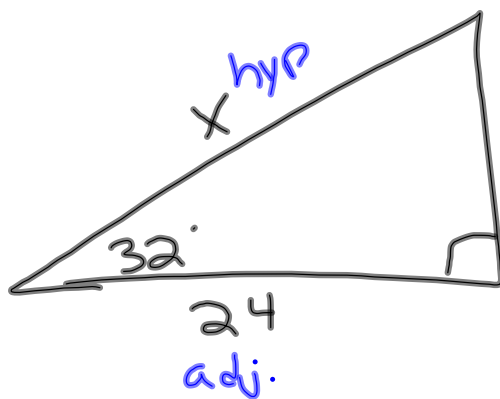
$$x \approx 77.1$$



$$\frac{\tan 40}{1} = \frac{x}{10}$$

$$x = 10 \cdot \tan 40$$

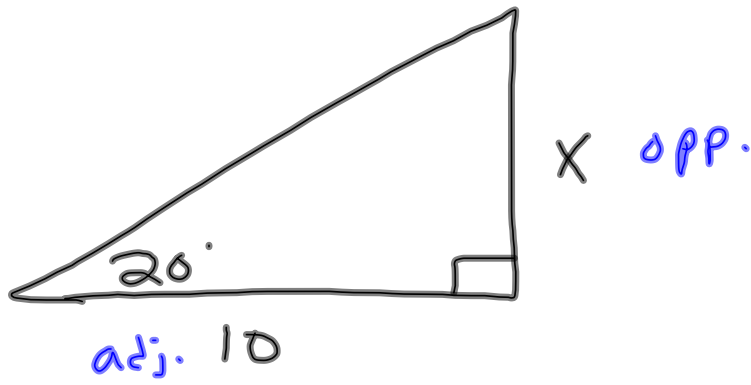
$$x \approx 8.4$$



$$\frac{\cos 32}{1} = \frac{24}{x}$$

$$\frac{x \cdot \cos 32}{\cancel{\cos 32}} = \frac{24}{\cancel{\cos 32}}$$

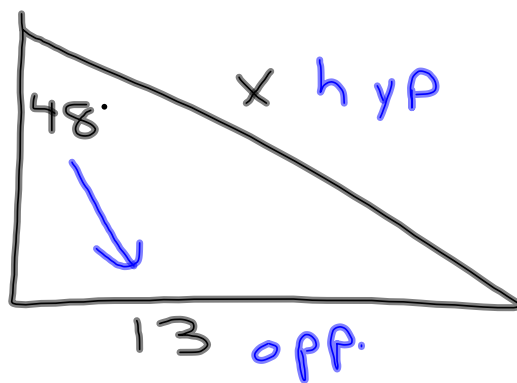
$$x \approx 28.3$$



$$\frac{\tan 20^\circ}{1} = \frac{x}{10}$$

$$x = 10 \cdot \tan 20^\circ$$

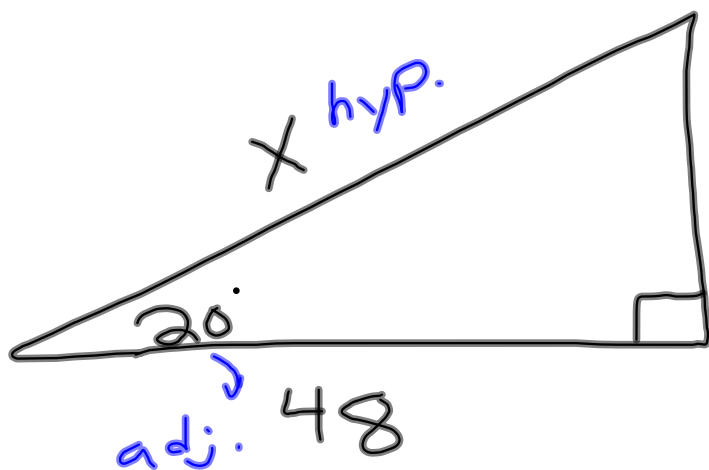
$$\approx 3.6$$



$$\frac{\sin 48^\circ}{1} = \frac{13}{x}$$

$$\frac{x \cdot \cancel{\sin 48^\circ}}{\cancel{\sin 48^\circ}} = \frac{13}{\sin 48^\circ}$$

$$x \approx 17.5$$



$$\frac{\cos 20^\circ}{1} = \frac{48}{X}$$

$$\frac{X \cdot \cancel{\cos 20^\circ}}{\cancel{\cos 20^\circ}} = \frac{48}{\cos 20^\circ}$$

$$X \approx 51.1$$