

November 26

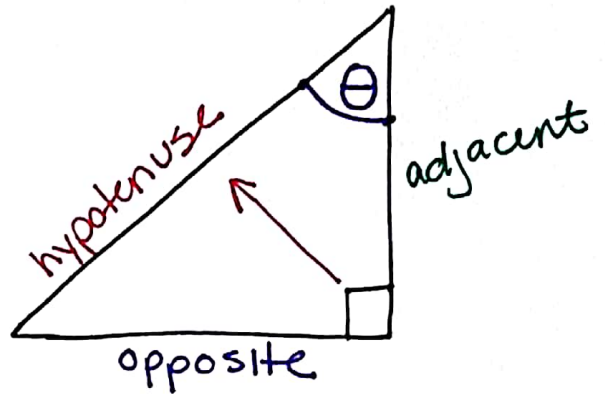
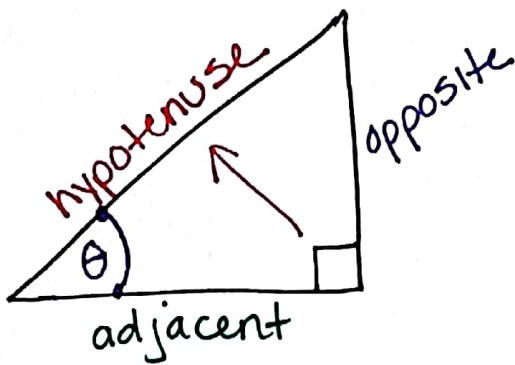
Right Triangle Trig

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

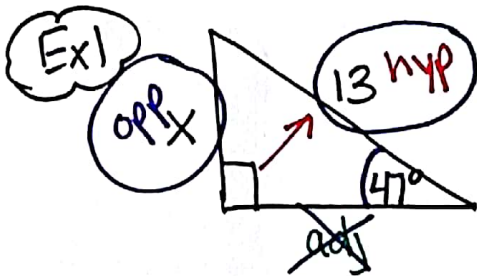
$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

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

"Soh Cah Toa"

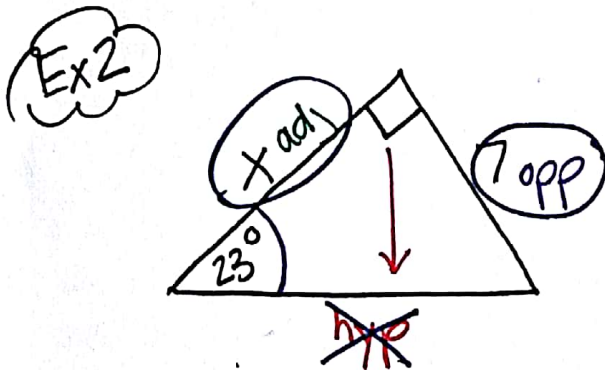


Solve for x:



$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$
$$13 \cdot \sin 47^\circ = \frac{x}{13} \cdot 13$$

$$\boxed{9.51 = x}$$

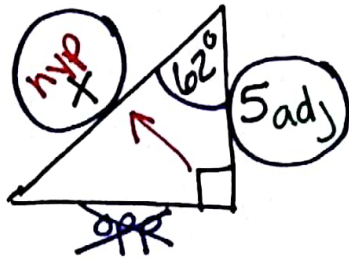


$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$
$$x \cdot \tan 23^\circ = \frac{7}{x} \cdot x$$

$$\frac{x \cdot \tan 23^\circ}{\tan 23^\circ} = \frac{7}{\tan 23^\circ}$$

$$\boxed{x = 16.49}$$

Ex3



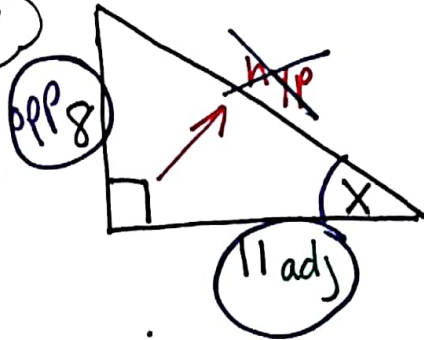
$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$x \cdot \cos 62^\circ = \frac{5}{x} \cdot x$$

$$\frac{x \cdot \cos 62^\circ}{\cos 62^\circ} = \frac{5}{\cos 62^\circ}$$

$$x = 10.65$$

Ex4



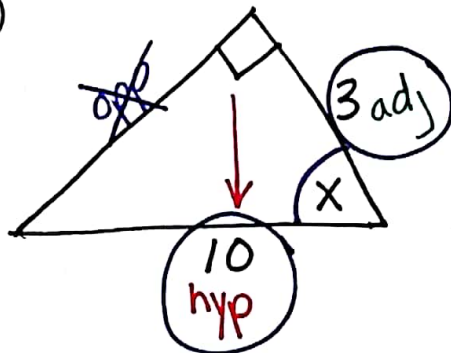
$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$\tan^{-1}(\tan x) = \tan^{-1}\left(\frac{8}{11}\right)$$

$$x = \tan^{-1}\left(\frac{8}{11}\right)$$

$$x = 36.03^\circ$$

Ex5



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

$$\cos^{-1}(\cos x) = \cos^{-1}\left(\frac{3}{10}\right)$$

$$x = \cos^{-1}\left(\frac{3}{10}\right)$$

$$x = 72.54^\circ$$