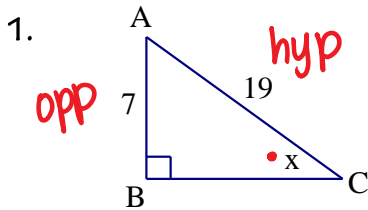


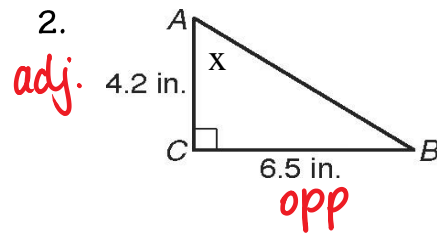
8.3 Part 2: Finding Missing Angles



$$\sin x = \frac{7}{19}$$

$$x = \sin^{-1}\left(\frac{7}{19}\right)$$

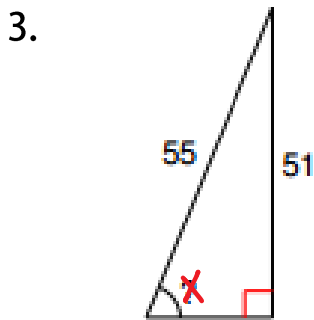
$$x = 22^\circ$$



$$\tan x = \frac{6.5}{4.2}$$

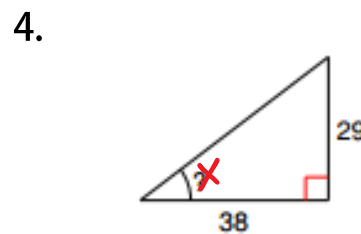
$$x = \tan^{-1}\left(\frac{6.5}{4.2}\right)$$

$$x = 57^\circ$$



$$\sin x = \frac{51}{55}$$

$$x = \sin^{-1}\left(\frac{51}{55}\right) = 68^\circ$$



$$\tan x = \frac{29}{38}$$

$$x = \tan^{-1}\left(\frac{29}{38}\right) = 37^\circ$$

5) $\tan Y = .6494$

$$y = \tan^{-1}(.6494)$$

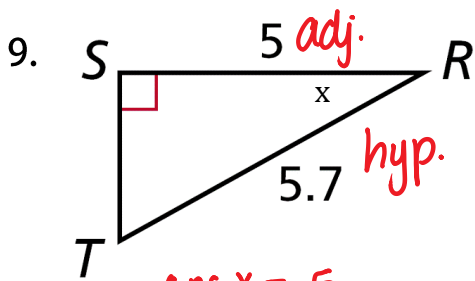
$$y = 33^\circ$$

6) $\cos 84 = .105$

7) $\sin 21 = .358$ 8) $\sin C = .2756$

$$C = \sin^{-1}(.2756)$$

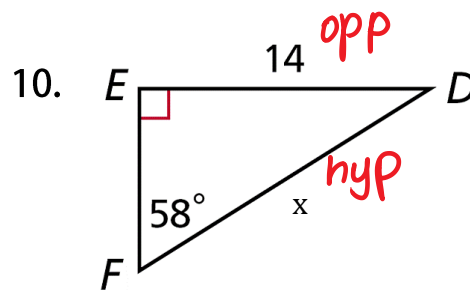
$$C = 16^\circ$$



$$\cos X = \frac{5}{5.7}$$

$$X = \cos^{-1}\left(\frac{5}{5.7}\right)$$

$$X = 29^\circ$$

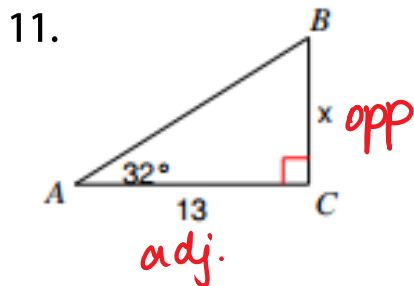


$$\sin 58 = \frac{14}{x}$$

$$x \cdot \sin 58 = 14$$

$$\frac{x \cdot \sin 58}{\sin 58} = \frac{14}{\sin 58}$$

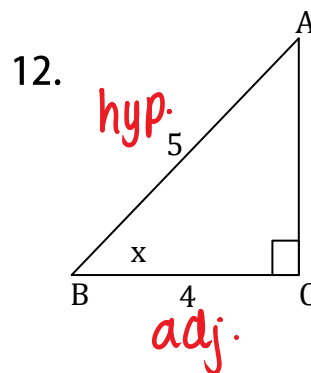
$$x = 16.51$$



$$\tan 32 = \frac{x}{13}$$

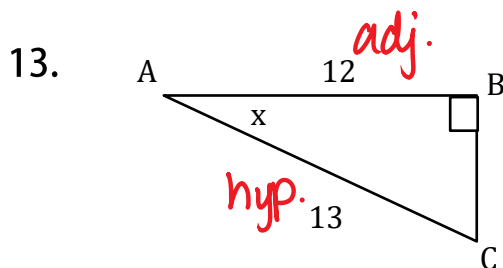
$$13 \cdot \tan 32 = x$$

$$x = 8.12$$



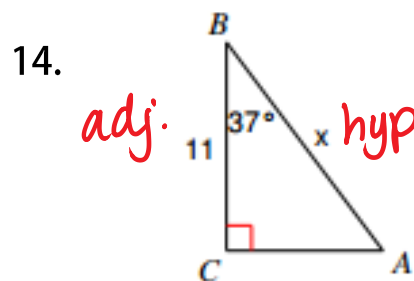
$$\cos X = \frac{4}{5}$$

$$X = \cos^{-1}\left(\frac{4}{5}\right) = 37^\circ$$



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

$$X = \cos^{-1}\left(\frac{12}{13}\right) = 23^\circ$$



$$\cos 37 = \frac{11}{x}$$

$$x = \frac{11}{\cos 37} \quad x = 13.7$$