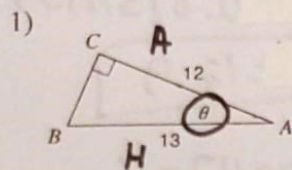


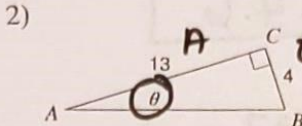
SOHCAHTOA

Find the measure of each angle indicated. Round to the nearest tenth.

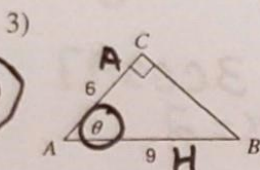


$\theta = 22.6^\circ$
 $\cos \theta = \frac{12}{13}$
 $\theta = \cos^{-1}\left(\frac{12}{13}\right)$

17.1°

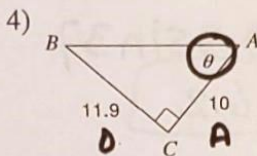


$\tan \theta = \frac{4}{13}$
 $\theta = \tan^{-1}\left(\frac{4}{13}\right)$



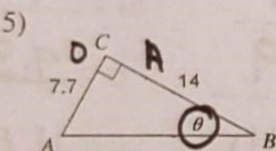
48.2°

$\cos \theta = \frac{6}{9}$
 $\theta = \cos^{-1}\left(\frac{6}{9}\right)$



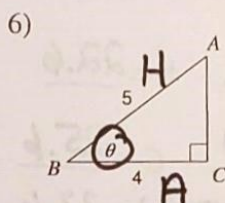
$\tan \theta = \frac{11.9}{10}$
 $\theta = \tan^{-1}\left(\frac{11.9}{10}\right)$

50°

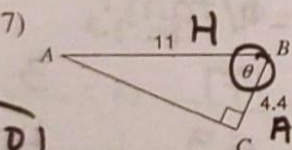


28.8°

$\tan \theta = \frac{7.7}{14}$
 $\theta = \tan^{-1}\left(\frac{7.7}{14}\right)$

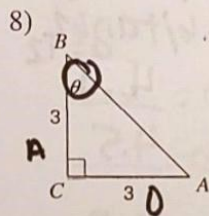


$\cos \theta = \frac{4}{5}$
 $\theta = \cos^{-1}\left(\frac{4}{5}\right)$
 36.9°



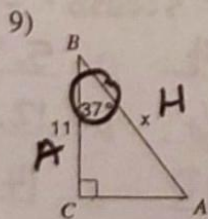
26.4°

$\cos \theta = \frac{4.4}{11}$
 $\theta = \cos^{-1}\left(\frac{4.4}{11}\right)$

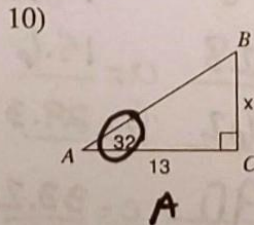


$\tan \theta = \frac{3}{3}$
 $\theta = \tan^{-1}\left(\frac{3}{3}\right)$
 $\theta = 45^\circ$

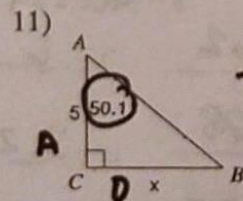
Find the measure of each side indicated. Round to the nearest tenth.



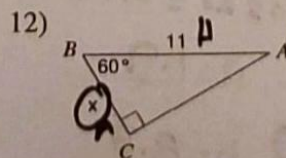
$\cos 37 = \frac{11}{x}$
 $x = \frac{11}{\cos 37}$
 $x = 13.8$



$\tan 32 = \frac{x}{13}$
 $x = 13 \tan 32$
 $x = 8.1$

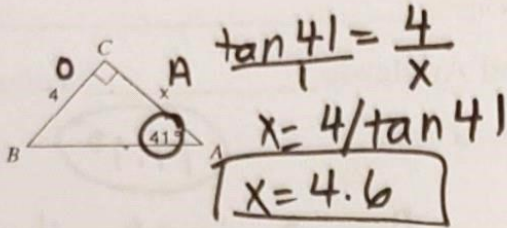


$\tan 50.1 = \frac{x}{5}$
 $x = 5 \tan 50.1$
 $x = 6$



$\cos 60 = \frac{x}{11}$
 $x = 11 \cos 60$
 $x = 5.5$

13)

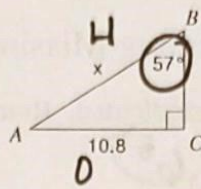


$$\tan 41 = \frac{4}{x}$$

$$x = 4 / \tan 41$$

$$x = 4.6$$

14)

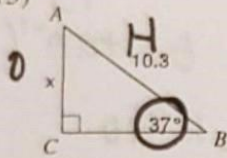


$$\frac{\sin 57 = 10.8}{x}$$

$$x = 10.8 / \sin 57$$

$$x = 12.9$$

15)

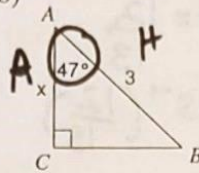


$$\frac{\sin 37 = x}{10.3}$$

$$x = 10.3 \sin 37$$

$$x = 6.2$$

16)



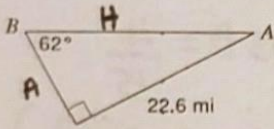
$$\frac{\cos 47 = x}{3}$$

$$x = 3 \cos 47$$

$$x = 2$$

Solve each triangle. Round answers to the nearest tenth.

17)



$$A = 28 \quad a = 12$$

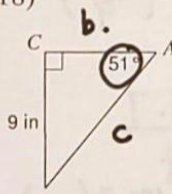
$$B = 62 \quad b = 22.6$$

$$C = 90 \quad c = 25.6$$

$$a: \tan 62 = \frac{22.6}{a}$$

$$a = 22.6 / \tan 62$$

18)



$$A = 51 \quad a = 9$$

$$B = 39 \quad b = 7.3$$

$$C = 90 \quad c = 11.6$$

$$b = \tan 51 = \frac{9}{b}$$

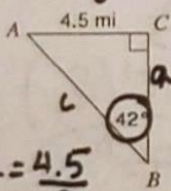
$$b = 9 / \tan 51$$

$$b: \frac{\sin 62 = 22.6}{b}$$

$$b = 22.6 / \sin 62$$

$$b = 22.6$$

19)

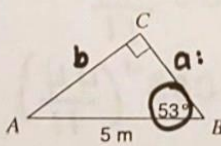


$$A = 48 \quad a = 5$$

$$B = 42 \quad b = 4.5$$

$$C = 90 \quad c = 6.7$$

20)



$$A = 37 \quad a = 3$$

$$B = 53 \quad b = 4$$

$$C = 90 \quad c = 5$$

$$a: \cos 53 = \frac{a}{5}$$

$$a = 5 \cos 53 = 3$$

$$a: \tan 42 = \frac{4.5}{a}$$

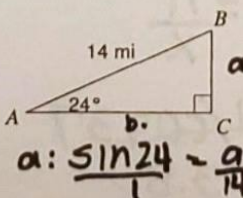
$$a = 4.5 / \tan 42$$

$$a = 5$$

$$c: \frac{\sin 42 = 4.5}{c} \quad c = 4.5 / \sin 42$$

$$c = 6.7$$

22)



$$A = 24 \quad a = 5.7$$

$$B = 66 \quad b = 12.8$$

$$C = 90 \quad c = 14$$

$$b: \cos 24 = \frac{b}{14}$$

$$b = 14 \cos 24 \quad b = 12.8$$

$$a: \tan 28 = \frac{a}{29.3}$$

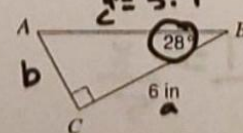
$$a = 29.3 \tan 28$$

$$a = 15.6$$

$$h: \cos 28 = \frac{29.3}{h}$$

$$h = 29.3 / \cos 28 = 33.2$$

24)



$$A = 62 \quad a = 6$$

$$B = 28 \quad b = 3.2$$

$$C = 90 \quad c = 6.8$$

$$b: \frac{\cos 40 = b}{3}$$

$$b = 3 \cos 40$$

$$b = 2.3$$

$$A = 40 \quad a = 1.9$$

$$B = 50 \quad b = 2.3$$

$$C = 90 \quad c = 3$$

$$a: \frac{\sin 40 = a}{3}$$

$$a = 3 \sin 40$$

$$a = 1.9$$

$$b: \tan 28 = \frac{b}{6}$$

$$b = 6 \tan 28$$

$$b = 3.2$$

$$c: \frac{\cos 28 = c}{6}$$

$$c = 6 / \cos 28$$

$$c = 6.8$$