

Name: _____ **ANSWER KEY** _____ Hour: _____ Date: _____

Soh - Cah - Toa: *Trigonometry Assignment*

Part one: Find the ratio for each given Trig. Function.

$$\sin \angle A = \frac{8}{20} = \frac{2}{5}$$

$$\cos \angle W = \frac{30}{63} = \frac{10}{21}$$

$$\sin \angle P = \frac{30}{63} = \frac{10}{21}$$

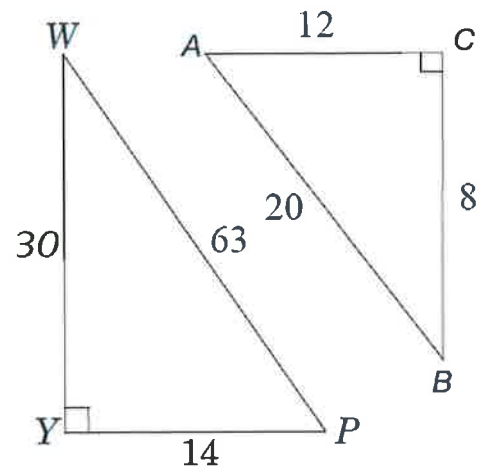
$$\cos \angle A = \frac{12}{20} = \frac{3}{5}$$

$$\tan \angle A = \frac{8}{12} = \frac{2}{3}$$

$$\cos \angle B = \frac{8}{20} = \frac{2}{5}$$

$$\sin \angle B = \frac{12}{20} = \frac{3}{5}$$

$$\tan \angle W = \frac{14}{30} = \frac{7}{15}$$



Part Two: Find the value of each ratio. Round your answer to 4 places past the decimal place.

$$\sin 51^\circ = 0.7771$$

$$\cos 47^\circ = 0.6820$$

$$\tan 9^\circ = 0.1584$$

$$\sin 26^\circ = 0.4384$$

$$\tan 89^\circ = 57.2899$$

$$\cos 1^\circ = 0.9998$$

Part Three: Find the measure of each angle to the nearest whole degree.

$$\sin A = 0.9876 = 81^\circ$$

$$\cos B = 0.8829 = 28^\circ$$

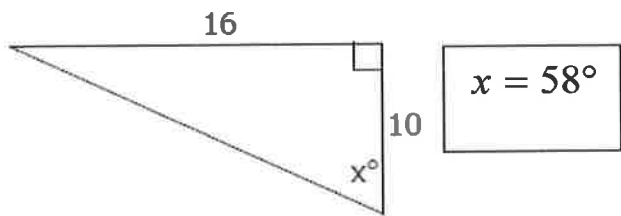
$$\tan S = 0.0349 = 2^\circ$$

$$\sin T = 0.0523 = 3^\circ$$

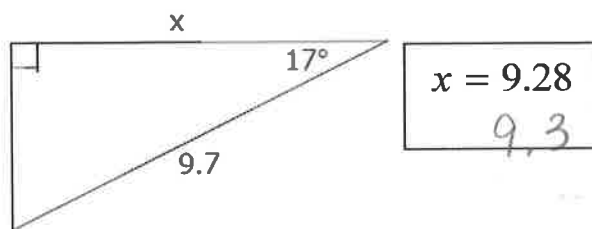
$$\cos X = 0.4848 = 61^\circ$$

$$\tan U = 28.6362 = 88^\circ$$

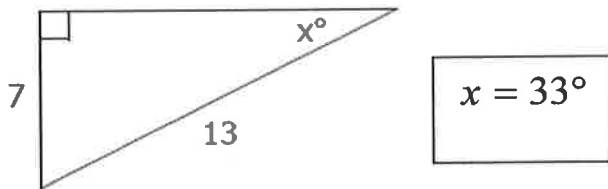
Part Four: Find the value of "x". Round sides to the nearest tenth and angles the nearest whole degree.



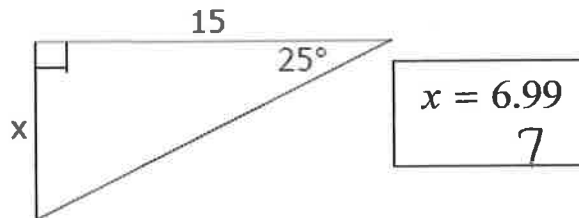
$x = 58^\circ$



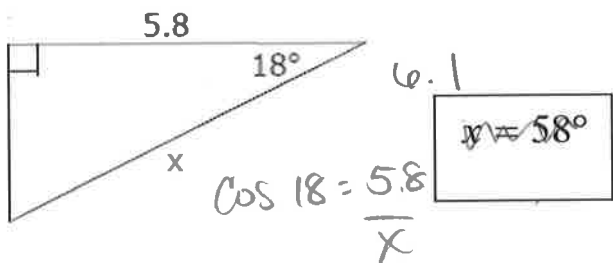
$x = 9.28$
9.3



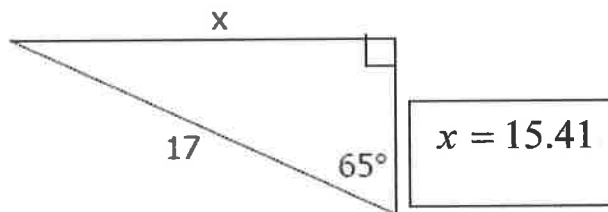
$x = 33^\circ$



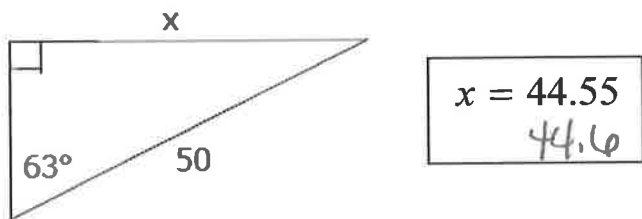
$x = 6.99$
7



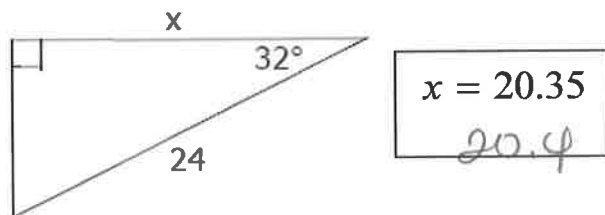
~~$x = 58^\circ$~~



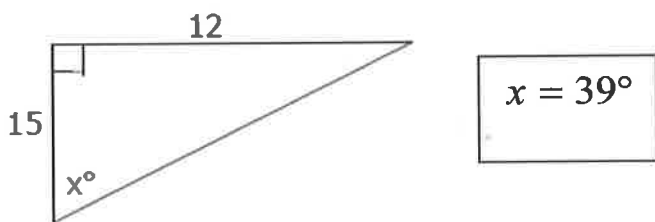
$x = 15.41$



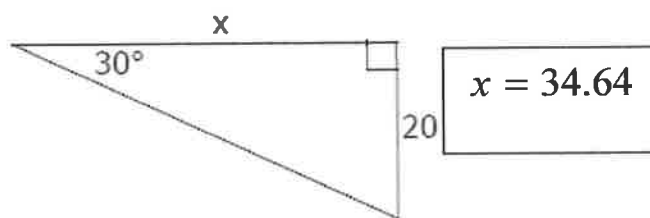
$x = 44.55$
44.6



$x = 20.35$
20.4



$x = 39^\circ$



$x = 34.64$