

Trig - Finding Side Measures

Name: Key

STEP 1

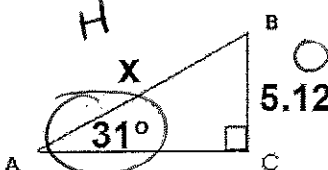
Label missing and given sides to determine which trig ratio you will set up.

STEP 2

Set up the trig ratio and solve.

$$\sin 40^\circ = \frac{x}{12} \quad \text{If "x" flies High... Multiply}$$

$$\sin 40^\circ = \frac{8.94}{x} \quad \text{If "x" is on the bottom... Swap'm and Divide}$$

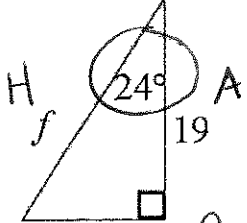
1. 

$$\sin \theta = \frac{O}{H}$$

$$\sin 31 = \frac{5.12}{x}$$

$$x = \frac{5.12}{\sin 31}$$

$$x = 9.941$$

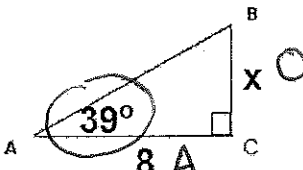
2. 

$$\cos \theta = \frac{A}{H}$$

$$\cos 24 = \frac{19}{f}$$

$$f = \frac{19}{\cos 24}$$

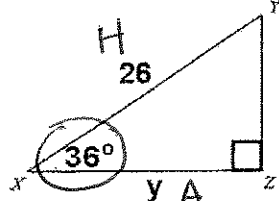
$$f = 20.798$$

3. 

$$\tan \theta = \frac{O}{A}$$

$$(8) \tan 39 = \frac{x}{8}$$

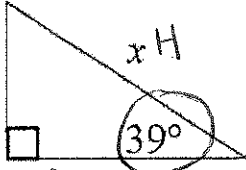
$$6.478 = x$$

4. 

$$\cos \theta = \frac{A}{H}$$

$$(26) \cos 36 = \frac{y}{26}$$

$$21.034 = y$$

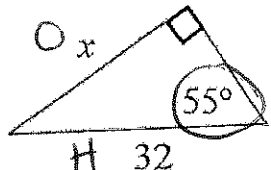
5. 

$$\cos \theta = \frac{A}{H}$$

$$\cos 39 = \frac{14}{x}$$

$$x = \frac{14}{\cos 39}$$

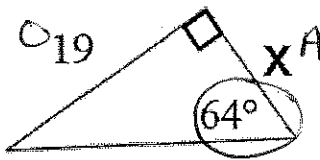
$$x = 18.015$$

6. 

$$\sin \theta = \frac{O}{H}$$

$$(32) \sin 55 = \frac{x}{32}$$

$$26.213 = x$$

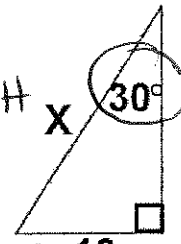
7. 

$$\tan \theta = \frac{O}{A}$$

$$\tan 64 = \frac{19}{x}$$

$$x = \frac{19}{\tan 64}$$

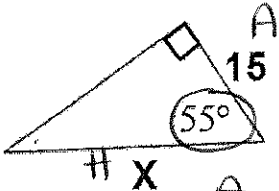
$$x = 9.267$$

8. 

$$\sin \theta = \frac{O}{H}$$

$$\sin 30 = \frac{10}{x}$$

$$x = \frac{10}{\sin 30} = 20$$

9. 

$$\cos \theta = \frac{A}{H}$$

$$\cos 55 = \frac{15}{x}$$

$$x = \frac{15}{\cos 55}$$

$$x = 26.152$$