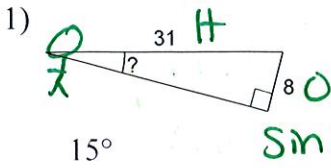
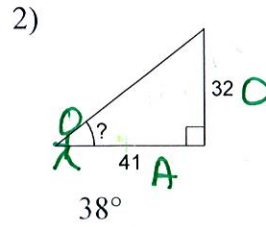


Finding Missing Angles & Sides

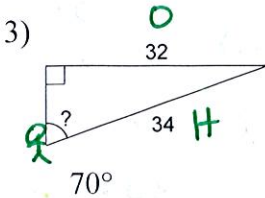
Find the measure of the indicated angle to the nearest degree.



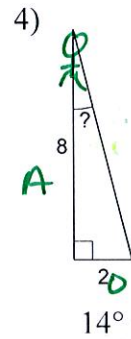
$\sin \theta = \frac{8}{31}$
 $\theta = 15$



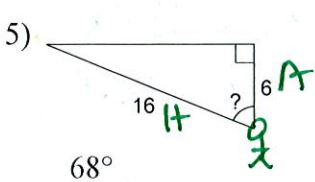
$\tan \theta = \frac{32}{41}$
 $\theta = 38$



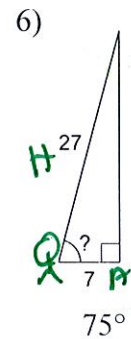
$\sin \theta = \frac{32}{34}$
 $\theta = 70$



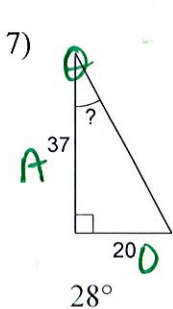
$\tan \theta = \frac{2}{8}$
 $\theta = 14$



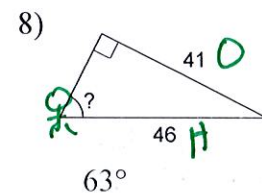
$\cos \theta = \frac{6}{16}$
 $\theta = 68$



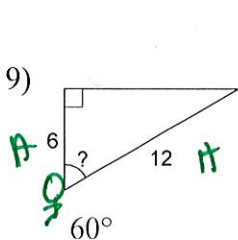
$\cos \theta = \frac{7}{27}$
 $\theta = 75$



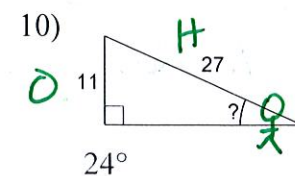
$\tan \theta = \frac{20}{37}$
 $\theta = 28$



$\sin \theta = \frac{41}{46}$
 $\theta = 63$



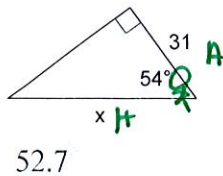
$\cos \theta = \frac{6}{12}$
 $\theta = 60$



$\sin \theta = \frac{11}{27}$
 $\theta = 24$

Find the missing side. Round to the nearest tenth.

11)

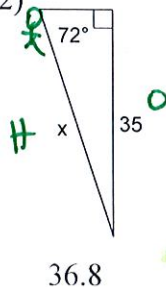


$$\cos 54 = \frac{31}{x}$$

$$x = \frac{31}{\cos 54}$$

$$x = 52.7$$

12)

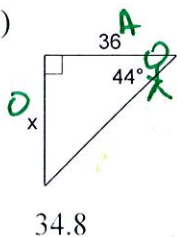


$$\sin 72 = \frac{x}{35}$$

$$x = \frac{35 \sin 72}{1}$$

$$x = 36.8$$

13)

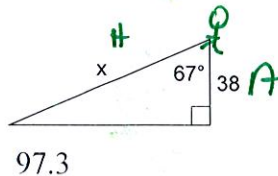


$$\tan 44 = \frac{x}{36}$$

$$36 \tan 44 = x$$

$$x = 34.8$$

14)

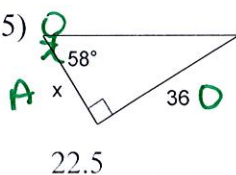


$$\cos 67 = \frac{x}{38}$$

$$x = \frac{38 \cos 67}{1}$$

$$x = 97.3$$

15)

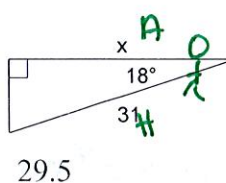


$$\tan 58 = \frac{x}{22.5}$$

$$x = \frac{36 \tan 58}{1}$$

$$x = 22.5$$

16)

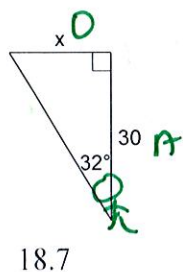


$$\cos 18 = \frac{x}{31}$$

$$31 \cos 18 = x$$

$$x = 29.5$$

17)

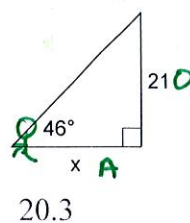


$$\tan 32 = \frac{x}{18.7}$$

$$30 \tan 32 = x$$

$$x = 18.7$$

18)

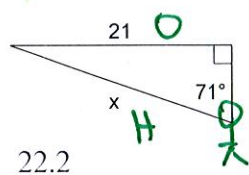


$$\tan 46 = \frac{21}{x}$$

$$x = \frac{21}{\tan 46}$$

$$x = 20.3$$

19)

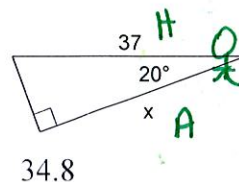


$$\sin 71 = \frac{x}{21}$$

$$x = \frac{21 \sin 71}{1}$$

$$x = 22.2$$

20)



$$\cos 20 = \frac{x}{37}$$

$$37 \cos 20 = x$$

$$x = 34.8$$