

InverseInverse Trig Functions:

$$\begin{aligned}\sin^{-1}(x) &= \arcsin(x) \\ \cos^{-1}(x) &= \arccos(x) \\ \tan^{-1}(x) &= \arctan(x)\end{aligned}$$

Inverse Function Properties

$$\begin{aligned}\sin(\sin^{-1}(x)) &= x \\ \cos(\cos^{-1}(x)) &= x \\ \tan(\tan^{-1}(x)) &= x\end{aligned}$$

$$\begin{aligned}\sin^{-1}(\sin(x)) &= x \\ \cos^{-1}(\cos(x)) &= x \\ \tan^{-1}(\tan(x)) &= x\end{aligned}$$

Recall the below Trig ratios:**SOH-CAH-TOA**

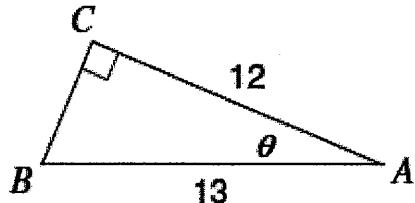
$$\sin \angle A = \frac{\text{Opp}}{\text{Hyp}}$$

$$\cos \angle A = \frac{\text{Adj}}{\text{Hyp}}$$

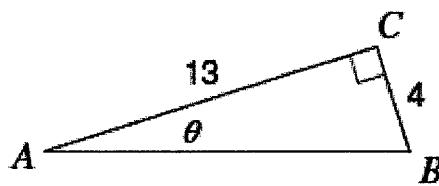
$$\tan \angle A = \frac{\text{Opp}}{\text{Adj}}$$

Find the value of indicated angle

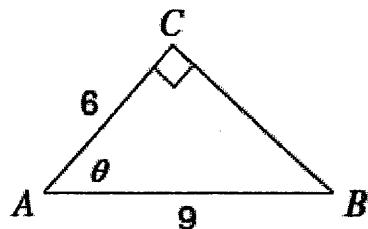
1.



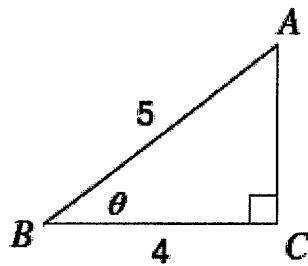
2.



3.



4.



SOH-CAH-TOA

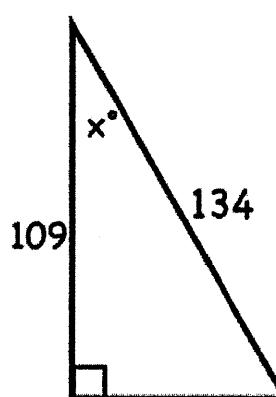
$$\sin \angle A = \frac{Opp}{Hyp}$$

$$\cos \angle A = \frac{Adj}{Hyp}$$

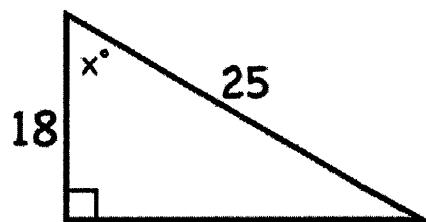
$$\tan \angle A = \frac{Opp}{Adj}$$

Find the value of indicated angle

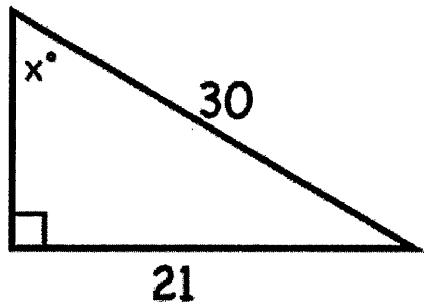
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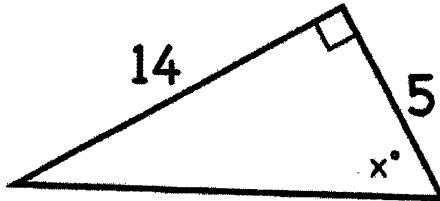
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7.



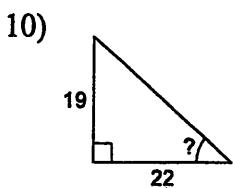
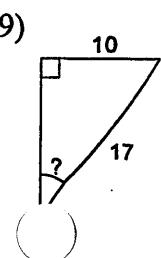
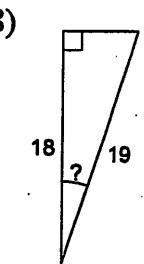
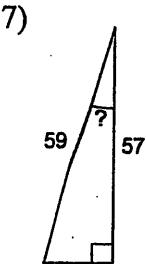
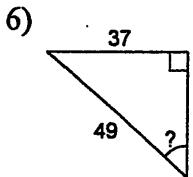
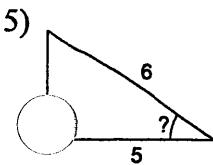
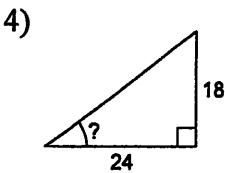
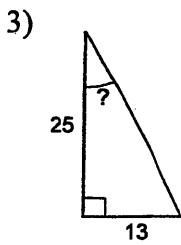
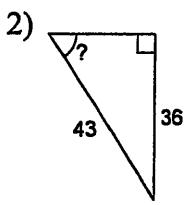
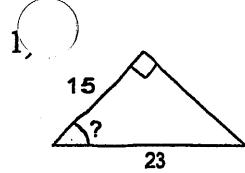
8.



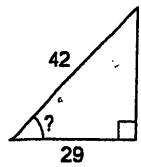
Assignment

(9)

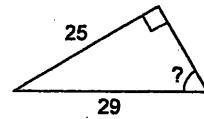
Date _____ Period _____

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

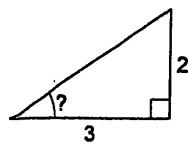
11)



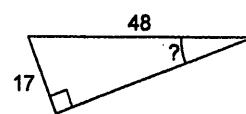
12)



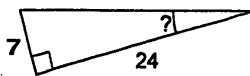
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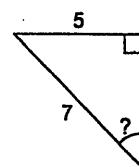
14)



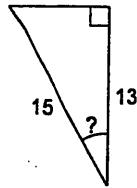
15)



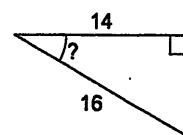
16)



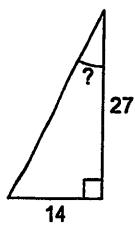
17)



18)



19)



20)

