

Put calculators in Degree Mode!

SOH

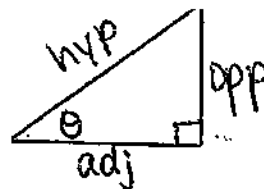
CAH

TOA

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$



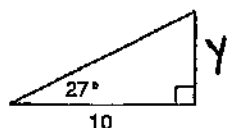
Name _____

Using Trigonometry To Find Lengths

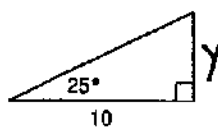
Date _____ Period _____

Find the missing side. Round to the nearest tenth.

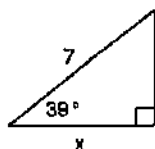
1)



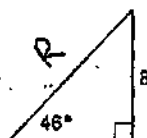
2)



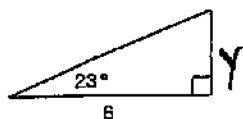
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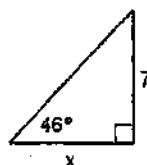
4)



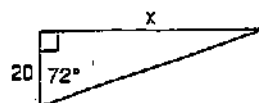
5)



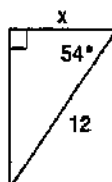
6)



7)



8)



to find θ , you must use inverse trig functions: $\sin^{-1}$
 $\cos^{-1}$
 $\tan^{-1}$
 ex) $\sin \theta = .5$ so $\sin^{-1}(.5) = \theta$
 $\theta = 30^\circ$

Using Trigonometry to Find Angle Measures

Find each angle measure to the nearest degree.

1) $\tan \theta = 2.0503$

2) $\cos \theta = 0.1219$

3) $\tan \theta = 0.6494$

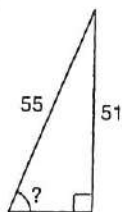
4) $\sin \theta = 0.8746$

5) $\cos \theta = 0.6820$

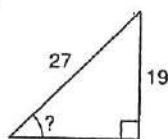
6) $\sin \theta = 0.2756$

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

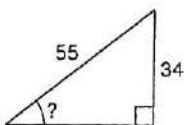
7)



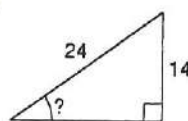
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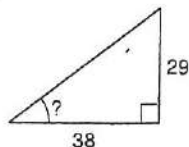
9)



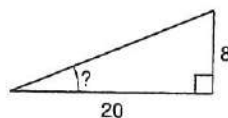
10)



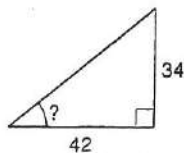
11)



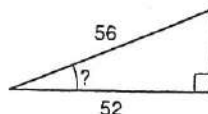
12)



13)



14)

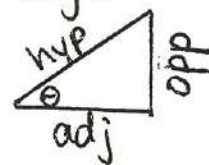


for #7-14

SOH: $\sin^{-1}\left(\frac{\text{opp}}{\text{hyp}}\right) = \theta$

CAH: $\cos^{-1}\left(\frac{\text{adj}}{\text{hyp}}\right) = \theta$

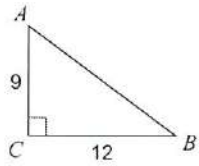
TOA: $\tan^{-1}\left(\frac{\text{opp}}{\text{adj}}\right) = \theta$



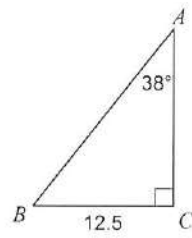
Worksheet #2 - Solving Right Triangles

Solve each triangle for all missing sides and angles. Show all work for #1-4 only

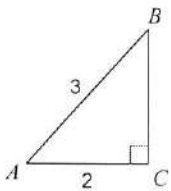
1)



2)



3)



4)

