

Name _____
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Date _____
Algebra II

Pythagorean Identity

1. Using the identity $\sin^2 \theta + \cos^2 \theta = 1$, find the six trigonometric values if $\sin \theta = .4$ and θ is in Quadrant I. Round all values to the nearest hundredth.

a) $\sin \theta =$ b) $\cos \theta =$ c) $\tan \theta =$

d) $\csc \theta =$ e) $\sec \theta =$ f) $\cot \theta =$

2. Using the identity $\sin^2 \theta + \cos^2 \theta = 1$, find the six trigonometric values if $\cos \theta = -.2$ and θ is in Quadrant III. Round all values to the nearest hundredth.

a) $\sin \theta =$ b) $\cos \theta =$ c) $\tan \theta =$

d) $\csc \theta =$ e) $\sec \theta =$ f) $\cot \theta =$

3. Using the identity $\sin^2 \theta + \cos^2 \theta = 1$, find the six trigonometric values if $\cos \theta = -.28$ and θ is in Quadrant II. Round all values to the nearest hundredth.

a) $\sin \theta =$ b) $\cos \theta =$ c) $\tan \theta =$

d) $\csc \theta =$ e) $\sec \theta =$ f) $\cot \theta =$

4. Using the identity $\sin^2 \theta + \cos^2 \theta = 1$, find the six trigonometric values if $\sin \theta = -.15$ and $\cos \theta < 0$. Round all values to the nearest hundredth.

b) $\sin \theta =$ b) $\cos \theta =$ c) $\tan \theta =$

e) $\csc \theta =$ e) $\sec \theta =$ f) $\cot \theta =$

5. Using the identity $\sin^2 \theta + \cos^2 \theta = 1$, find the value of $\tan \theta$, to the *nearest hundredth*, if $\cos \theta$ is -0.7 and θ is in Quadrant II.