

Trigonometric Values and Triangles

Use the definitions of the trigonometric functions to label the correct sides of the triangle. Then find the length of the third side and the values of the other five trigonometric functions.

1) If $\cos \theta = \frac{9}{41}$, find the following:

$\sin \theta =$ _____

$\tan \theta =$ _____

$\cot \theta =$ _____

$\sec \theta =$ _____

$\csc \theta =$ _____



2) If $\tan \theta = \frac{7}{24}$, find the following:

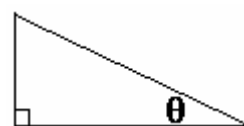
$\sin \theta =$ _____

$\cos \theta =$ _____

$\cot \theta =$ _____

$\sec \theta =$ _____

$\csc \theta =$ _____



In the problems below, you will also need to draw your triangle for reference.

3) If $\csc \theta = \frac{37}{12}$, find the following:

$\sin \theta =$ _____

$\cos \theta =$ _____

$\tan \theta =$ _____

$\cot \theta =$ _____

$\sec \theta =$ _____

4) If $\cot \theta = \frac{5}{4}$, find the following:

$\sin \theta =$ _____

$\cos \theta =$ _____

$\tan \theta =$ _____

$\sec \theta =$ _____

$\csc \theta =$ _____

3) If $\sin \theta = \frac{165}{173}$, find the following:

$\cos \theta =$ _____

$\tan \theta =$ _____

$\cot \theta =$ _____

$\sec \theta =$ _____

$\csc \theta =$ _____

4) If $\sec \theta = \frac{169}{119}$, find the following:

$\sin \theta =$ _____

$\cos \theta =$ _____

$\tan \theta =$ _____

$\cot \theta =$ _____

$\csc \theta =$ _____