

I. Find values to 4 decimals.

Set calculator in degree mode.

1. $\cos 87^\circ = .0523$
2. $\sin 212^\circ = -.5299$
3. $\tan 413^\circ = 1.3270$
4. $\cos 110^\circ = -.3420$
5. $\sin 37.4^\circ = .6074$
6. $\tan 42.81^\circ = .9263$
7. $\cos 137.23^\circ = -.7341$
8. $\tan 101^\circ 58' = -4.7181$
9. $\cos 103^\circ 14' = -.2289$
10. $\sin 8^\circ 51' = .1538$
11. $\cos 7^\circ 9' = .9922$
12. $\tan 7^\circ 4' = .1240$

II. Reciprocal functions. Find values to 4 decimal places.

1. $\sec 71^\circ = 3.0716$
2. $\cot 182^\circ = 28.6363$
3. $\csc 112^\circ = 1.0785$
4. $\sec 712.13^\circ = 1.0095$
5. $\csc 43.8^\circ = 1.4448$
6. $\cot 85.71^\circ = .0750$
7. $\csc 109^\circ 17' = 1.0594$
8. $\cot 10^\circ 56' = 5.1767$
9. $\sec 96^\circ 7' = -9.3850$
10. $\csc 192^\circ 3' = -4.7901$
11. $\cot 341^\circ 15' = -2.9459$
12. $\sec 71.62^\circ = 3.1714$

$\frac{1}{\cos 71^\circ} = \sec(71^\circ)$

III. Find the values to 4 decimal places. Set calculator in radians. Watch for reciprocals.

1. $\sin 2.1 = .8632$
2. $\cos 1.8 = -.2272$
3. $\tan \frac{\pi}{7} = .4816$
4. $\csc 4.6 = -1.0063$
5. $\cot 1.7 = -1.299$
6. $\sec \frac{\pi}{9} = 1.0642$
7. $\sin \frac{7\pi}{13} = .9927$
8. $\cos 4.1 = -.5748$

IV. Find the angle in decimal degrees. (2 decimal places)

1. $\sin \theta = 0.5878 \Rightarrow \theta = 36^\circ$
2. $\cos \theta = 0.4418 \Rightarrow \theta = 63.78^\circ$
3. $\sin \theta = 0.6534 \Rightarrow \theta = 40.80^\circ$
4. $\cos \theta = 0.2029 \Rightarrow \theta = 78.29^\circ$
5. $\tan \theta = 0.0235 \Rightarrow \theta = 1.35^\circ$
6. $\tan \theta = 76.93 \Rightarrow \theta = 89.26^\circ$
7. $\csc \theta = 5.3249 \Rightarrow \theta = 10.82^\circ \rightarrow \sin^{-1}(\frac{1}{5.3249})$
8. $\sec \theta = 2.0076 \Rightarrow \theta = 60.13^\circ$
9. $\cot \theta = 9.5603 \Rightarrow \theta = 5.97^\circ$
10. $\sec \theta = 1.0059 \Rightarrow \theta = 6.21^\circ$
11. $\csc \theta = 8.9140 \Rightarrow \theta = 6.44^\circ$

$\sin^{-1}(.5878)$

V. Find the angle in degrees and minutes. Round to nearest minute.

1. $\cos \theta = 0.0942 \Rightarrow \theta = 84^\circ 36'$
2. $\tan \theta = 5.2478 \Rightarrow \theta = 79^\circ 13'$
3. $\sin \theta = 0.8852 \Rightarrow \theta = 62^\circ 17'$
4. $\sec \theta = 2.0045 \Rightarrow \theta = 60^\circ 4'$
5. $\cot \theta = 0.7006 \Rightarrow \theta = 54^\circ 59'$
6. $\csc \theta = 1.3451 \Rightarrow \theta = 48^\circ 2'$
7. $\sin \theta = 0.9874 \Rightarrow \theta = 80^\circ 54'$
8. $\tan \theta = 19.58 \Rightarrow \theta = 87^\circ 5'$
9. $\sec \theta = 2.0014 \Rightarrow \theta = 60^\circ 1'$

VI. Find the angle in radians. Round to the nearest hundredths.

1. $\cos \theta = 0.6598 \Rightarrow \theta = .85$
2. $\sin \theta = 0.7774 \Rightarrow \theta = .89$
3. $\tan \theta = 1.7845 \Rightarrow \theta = 1.06$
4. $\sec \theta = 4.2525 \Rightarrow \theta = 1.33$
5. $\csc \theta = 5.0224 \Rightarrow \theta = .20$
6. $\cot \theta = 2.9785 \Rightarrow \theta = .32$
7. $\sin \theta = 0.5504 \Rightarrow \theta = .58$