Math 3   Name: KEY

Unit 1.6 Finding Trigonometric Functions Values Using Calculator PRACTICE

Use a calculator to find a decimal approximation for each value. Give as many digits as your calculator displays.

1) $\sin 38° 42'$ 0.6252427   2) $\cot 41° 24'$ 1.1342773   3) $\sec 13° 15'$ 1.0273488

4) $\csc 145° 45'$ 1.7768146   5) $\cot 183° 48'$ 15.055723   6) $\cos 421° 30'$ 0.4771588

7) $\sec 312° 12'$ 1.4887142   8) $\tan -80° 6'$ -5.7297416   9) $\sin -317° 36'$ 0.6743024

10) $\cot -512° 20'$ 1.9074147   11) $\cos -15'$ 0.9999905   12) $\dfrac{1}{\sec 14.8°}$ 0.9668234

13) $\dfrac{1}{\cot 23.4°}$ 0.4327386   14) $\dfrac{\sin 33°}{\cos 33°}$ 0.6494076   15) $\dfrac{\cos 77°}{\sin 77°}$ 0.2308682

16) $\sin 35° \ \cos 55° + \ \cos 35° \ \sin 55°$ 17) $\cos 100° \ \cos 80° - \ \sin 100° \ \sin 80°$

                     1   −1

18) $\cos 75° 29' \ \cos 14° 31' - \ \sin 75° 29' \ \sin 14° 31'$ 19) $\sin 28° 14' \ \cos 61° 46' + \ \cos 28° 14' \ \sin 61° 46'$

                     0   1

Find a value of θ in the interval $[0°, 90°]$ that satisfies each statement. Leave answers in decimal degrees.

20) $\sin \theta = 0.84802194$ 57.997172°   21) $\tan \theta = 1.4739716$ 55.845496°

22) $\tan \theta = 6.4358841$ 81.168073°   23) $\sin \theta = 0.27843196$ 16.166641°

24) $\sec \theta = 1.1606249$ 30.502748°   25) $\cot \theta = 1.2575516$ 38.491580°

26) $\csc \theta = 1.3861147$ 46.173582°   27) $\sec \theta = 2.7496222$ 68.673241°

Use a calculator to decide whether each statement is true of false.

28) $\cos 40° = 2 \cos 20°$ false   29) $\sin 10° + \sin 10° = \sin 20°$ false

30) $\cos 70° = 2 \cos^2 35° - 1$ true   31) $\sin 50° = 2 \sin 25° \cos 25°$ true