

## Evaluating Trigonometric Expressions part 1

Evaluate the following trigonometric expressions by using the unit circle. Answers should be exact.

### Quadrant I

1.)  $\cos \frac{\pi}{3} =$

2.)  $\sin \frac{\pi}{2} =$

3.)  $\tan \frac{\pi}{4} =$

4.)  $\sin \frac{\pi}{6} =$

5.)  $\sec \frac{\pi}{6} =$

6.)  $\csc \frac{\pi}{4} =$

7.)  $\cot 0 =$

8.)  $\sin \frac{\pi}{3} =$

9.)  $\cos \frac{\pi}{6} =$

10.)  $\tan \frac{\pi}{3} =$

11.)  $\csc \frac{\pi}{6} =$

12.)  $\cos \frac{\pi}{2} =$

### Quadrant II

13.)  $\cos \frac{3\pi}{4} =$

14.)  $\tan \frac{5\pi}{6} =$

15.)  $\sin \pi =$

16.)  $\sec \frac{\pi}{2} =$

17.)  $\csc \frac{2\pi}{3} =$

18.)  $\sec \frac{2\pi}{3} =$

19.)  $\cos \frac{5\pi}{6} =$

20.)  $\cot \frac{3\pi}{4} =$

21.)  $\cos \pi =$

22.)  $\tan \frac{2\pi}{3} =$

23.)  $\sin \frac{2\pi}{3} =$

24.)  $\sec \frac{3\pi}{4} =$

### Quadrant III

25.)  $\sin \frac{3\pi}{2} =$

26.)  $\cos \frac{7\pi}{6} =$

27.)  $\tan \frac{4\pi}{3} =$

28.)  $\csc \frac{7\pi}{6} =$

29.)  $\cot \frac{5\pi}{4} =$

30.)  $\sec \frac{5\pi}{4} =$

31.)  $\sec \frac{3\pi}{2} =$

32.)  $\sin \frac{4\pi}{3} =$

33.)  $\cos \frac{4\pi}{3} =$

34.)  $\tan \frac{7\pi}{6} =$

35.)  $\sin \frac{5\pi}{4} =$

36.)  $\csc \pi =$

Quadrant IV

$$37.) \sin \frac{11\pi}{6} =$$

$$38.) \cos 2\pi =$$

$$39.) \tan \frac{5\pi}{3} =$$

$$40.) \cot \frac{3\pi}{2} =$$

$$41.) \sec \frac{11\pi}{6} =$$

$$42.) \csc \frac{7\pi}{4} =$$

$$43.) \cos \frac{5\pi}{3} =$$

$$44.) \sin \frac{5\pi}{3} =$$

$$45.) \tan \frac{11\pi}{6} =$$

$$46.) \sec \frac{5\pi}{3} =$$

$$47.) \cot \frac{7\pi}{4} =$$

$$48.) \sin 2\pi =$$

Entire Unit Circle

$$49.) \sin \frac{7\pi}{6} =$$

$$50.) \sin \frac{\pi}{2} =$$

$$51.) \sin \frac{5\pi}{3} =$$

$$52.) \sin \frac{3\pi}{4} =$$

$$53.) \cos \frac{5\pi}{6} =$$

$$54.) \cos \frac{7\pi}{4} =$$

$$55.) \cos \frac{4\pi}{3} =$$

$$56.) \cos \pi =$$

$$57.) \tan \frac{\pi}{6} =$$

$$58.) \tan \frac{3\pi}{4} =$$

$$59.) \tan \frac{3\pi}{2} =$$

$$60.) \tan \frac{5\pi}{3} =$$

$$61.) \csc \frac{\pi}{3} =$$

$$62.) \csc \frac{5\pi}{4} =$$

$$63.) \csc \frac{3\pi}{2} =$$

$$64.) \csc \frac{5\pi}{6} =$$

$$65.) \sec \frac{\pi}{3} =$$

$$66.) \sec \frac{3\pi}{4} =$$

$$67.) \sec \pi =$$

$$68.) \sec \frac{11\pi}{6} =$$

$$69.) \cot \frac{\pi}{6} =$$

$$70.) \cot \frac{5\pi}{4} =$$

$$71.) \cot \frac{2\pi}{3} =$$

$$72.) \cot 2\pi =$$