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

1.)
$$\cos \frac{\pi}{3} =$$
 2.) $\sin \frac{\pi}{2} =$ 3.) $\tan \frac{\pi}{4} =$ 4.) $\sin \frac{\pi}{6} =$

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

5.)
$$\sec \frac{\pi}{6} =$$
 6.) $\csc \frac{\pi}{4} =$ 7.) $\cot 0 =$ 8.) $\sin \frac{\pi}{3} =$

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

7.)
$$\cot 0 =$$

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

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

9.)
$$\cos \frac{\pi}{6} = 10.$$
) $\tan \frac{\pi}{3} = 11.$) $\csc \frac{\pi}{6} = 12.$) $\cos \frac{\pi}{2} = 12.$

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

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

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.)
$$\cos \pi =$$

21.)
$$\cos \pi =$$
 22.) $\tan \frac{2\pi}{3} =$ 23.) $\sin \frac{2\pi}{3} =$ 24.) $\sec \frac{3\pi}{4} =$

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

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.)
$$\cot \frac{5\pi}{4} = 30.$$
) $\sec \frac{5\pi}{4} = 31.$) $\sec \frac{3\pi}{2} = 32.$) $\sin \frac{4\pi}{3} = 32.$

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

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

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

33.)
$$\cos \frac{4\pi}{3} = 34.$$
) $\tan \frac{7\pi}{6} = 35.$) $\sin \frac{5\pi}{4} = 36.$) $\csc \pi = 36.$

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

36.)
$$\csc \pi =$$

Quadrant IV

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

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

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

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

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

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

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

45.)
$$\tan \frac{11\pi}{6} = 46.$$
) $\sec \frac{5\pi}{3} = 47.$) $\cot \frac{7\pi}{4} = 48.$) $\sin 2\pi =$

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

49.)
$$\sin \frac{7\pi}{6} = 50.$$
) $\sin \frac{\pi}{2} = 51.$) $\sin \frac{5\pi}{3} = 52.$) $\sin \frac{3\pi}{4} = 52.$

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

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

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

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

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.)
$$\sec \pi =$$

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

69.)
$$\cot \frac{\pi}{6} = 70.$$
) $\cot \frac{5\pi}{4} = 71.$) $\cot \frac{2\pi}{3} = 72.$) $\cot 2\pi =$

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