

Skip any in degrees. See lecture notes  
for unit circle.

## 20 Basic Trigonometry

Find the exact value of each.

1.  $\sin(60^\circ) =$

4.  $\sin(30^\circ) =$

2.  $\cos(60^\circ) =$

5.  $\cos(30^\circ) =$

3.  $\tan(60^\circ) =$

6.  $\tan(30^\circ) =$

7.  $\sin(\frac{\pi}{3}) =$

10.  $\sin(\frac{\pi}{6}) =$

8.  $\cos(\frac{\pi}{3}) =$

11.  $\cos(\frac{\pi}{6}) =$

9.  $\tan(\frac{\pi}{3}) =$

12.  $\tan(\frac{\pi}{6}) =$

13.  $\sin(45^\circ) =$

16.  $\sin(\frac{\pi}{4}) =$

14.  $\cos(45^\circ) =$

17.  $\cos(\frac{\pi}{4}) =$

15.  $\tan(45^\circ) =$

18.  $\tan(\frac{\pi}{4}) =$

19.  $\csc(60^\circ) =$

22.  $\cot(30^\circ) =$

20.  $\sec(60^\circ) =$

23.  $\csc(30^\circ) =$

21.  $\cot(60^\circ) =$

24.  $\sec(30^\circ) =$

25.  $\csc(\frac{\pi}{3}) =$

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

26.  $\sec(\frac{\pi}{3}) =$

29.  $\sec(\frac{\pi}{6}) =$

27.  $\cot(\frac{\pi}{3}) =$

30.  $\cot(\frac{\pi}{6}) =$

31.  $\csc(45^\circ) =$

34.  $\csc(\frac{\pi}{4}) =$

32.  $\sec(45^\circ) =$

35.  $\sec(\frac{\pi}{4}) =$

33.  $\cot(45^\circ) =$

36.  $\cot(\frac{\pi}{4}) =$

37.  $\sin(90^\circ) =$

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

38.  $\cos(90^\circ) =$

41.  $\cos(\frac{\pi}{2}) =$

39.  $\tan(90^\circ) =$

42.  $\tan(\frac{\pi}{2}) =$

43.  $\sin(180^\circ) =$

46.  $\sin(\pi) =$

44.  $\cos(180^\circ) =$

47.  $\cos(\pi) =$

45.  $\tan(180^\circ) =$

48.  $\tan(\pi) =$



$$49. \sin\left(\frac{2\pi}{3}\right) =$$

$$52. \sin\left(\frac{5\pi}{6}\right) =$$

$$50. \cos\left(\frac{4\pi}{3}\right) =$$

$$53. \cos\left(\frac{7\pi}{6}\right) =$$

$$51. \tan\left(\frac{5\pi}{3}\right) =$$

$$54. \tan\left(\frac{11\pi}{6}\right) =$$

55.  $\sin(0^\circ) =$

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

56.  $\cos(225^\circ) =$

59.  $\cos(\frac{5\pi}{4}) =$

57.  $\tan(150^\circ) =$

60.  $\tan(\frac{7\pi}{4}) =$