Trig/Stat FER#3 Name _____

Radian Measures and Trigonometric Functions Period _____

Find the angle measure θ, such that $0 \le \theta < 2\pi$, that corresponds to the measure given.

1. $\frac{7\pi}{2} =$ **2.** $\frac{11\pi}{3} =$ **3.** $\frac{17\pi}{4} =$ **4.** $\frac{29\pi}{6} =$

5. $\frac{-\pi}{2} =$ **6.** $\frac{-4\pi}{3} =$ **7.** $\frac{-9\pi}{4} =$ **8.** $\frac{-17\pi}{6} =$

Find the values of the indicated trigonometric functions at the given angle. Answers must be *exact*. (i.e. radical form)

9. $\sin\frac{3\pi}{2} =$ **10.** $\sin\frac{2\pi}{3} =$ **11.** $\sin\frac{7\pi}{4} =$ **12.** $\sin\frac{5\pi}{6} =$

13. $\sin\frac{-\pi}{2} =$ **14.** $\sin\frac{15\pi}{3} =$ **15.** $\sin\frac{5\pi}{4} =$ **16.** $\sin\frac{-13\pi}{6} =$

17. $\cos\pi =$ **18.** $\cos\frac{5\pi}{3} =$ **19.** $\cos\frac{7\pi}{4} =$ **20.** $\cos\frac{\pi}{6} =$

21. $\cos\frac{-\pi}{2} =$ **22.** $\cos\frac{-7\pi}{3} =$ **23.** $\cos\frac{13\pi}{4} =$ **24.** $\cos\frac{21\pi}{6} =$

25. $\tan\pi =$ **26.** $\tan\frac{\pi}{3} =$ **27.** $\tan\frac{3\pi}{4} =$ **28.** $\tan\frac{5\pi}{6} =$

29. $\tan\frac{-\pi}{2} =$ **30.** $\tan\frac{8\pi}{3} =$ **31.** $\tan\frac{-14\pi}{4} =$ **32.** $\tan\frac{19\pi}{6} =$

33. $\cot\frac{\pi}{2} =$ **34.** $\cot\frac{2\pi}{3} =$ **35.** $\cot\frac{-3\pi}{4} =$ **36.** $\cot\frac{13\pi}{6} =$

37. $\csc\frac{\pi}{2} =$ **38.** $\csc\frac{5\pi}{3} =$ **39.** $\csc\frac{7\pi}{4} =$ **40.** $\csc\frac{\pi}{6} =$

41. $\sec\frac{-3\pi}{2} =$ **42.** $\sec\frac{\pi}{3} =$ **43.** $\sec\frac{11\pi}{4} =$ **44.** $\sec\frac{-5\pi}{6} =$

45. $\tan 7\pi =$ **46.** $\sec\frac{-9\pi}{2} =$ **47.** $\csc\frac{21\pi}{2} =$ **48.** $\cot\frac{-19\pi}{2} =$

THE UNIT CIRCLE

1. Label all angles in radians.
2. Fill in all coordinates.