Trig Chapter 9 Practice Test 1

Name _____

In which quadrant are the following angles?

_____ 1. -50° _____ 2. 190° _____ 3. -250°

_____ 4. $\frac{\pi}{3}$ _____ 5. $\frac{5\pi}{4}$ _____ 6. $-\frac{4\pi}{3}$

Tell if the following two angles are coterminal or not coterminal.

_____ 7. -250° and 110° _____ 8. 50° and 310°

_____ 9. $\frac{\pi}{5}$ and $\frac{7\pi}{5}$ _____ 10. $\frac{\pi}{4}$ and $\frac{9\pi}{4}$

_____ 11. $-\frac{3\pi}{2}$ and $\frac{5\pi}{2}$ _____ 12. -380° and 700°

Give the reference angle for each angle given.

_____ 13. 100° _____ 14. -150° _____ 15. 150°

_____ 16. $\frac{4\pi}{3}$ _____ 17. $\frac{5\pi}{4}$ _____ 18. $-\frac{5\pi}{6}$

Find the values of certain functions of an angle in standard position with measure θ if the point with the given coordinates lies on its terminal side.

19. Coordinates (3, 4) Sin θ = _____ Cos θ = _____ Tan θ = _____

20. Coordinates (5, 12) Sin θ = _____ Cos θ = _____ Tan θ = _____

21. When cos $\theta = \frac{12}{13}$ and the terminal side of θ is in the 1st quadrant, find

Sin θ = _____ Csc θ = _____ Tan θ = _____ Cot θ = _____

22. When cos $\theta = \frac{8}{17}$ and the terminal side of θ is in the 1st quadrant, find

Sin θ = _____ Sec θ = _____ Tan θ = _____ Csc θ = _____

23. When $\cos\theta = \frac{5}{13}$ and the terminal side of θ is in the 1st quadrant, find

Sin θ = _____ Cot θ = _____ Tan θ = _____ Csc θ = _____

24. Give the radian measurement and point location for a unit circle.

Degree	Radian	Point location
30		
60		
135		
180		
210		
270		
300		

25. In radians, what is 40°? _____

26. In degrees, what is $\frac{\pi}{9}$? _____

27. In radians, what is 350°? _____

28. In degrees, what is $\frac{5\pi}{18}$? _____

Given the coordinate point, determine the angle formed with the x-axis in the **first** quadrant. Assume that the angle opens **counterclockwise** (in other words, all angles are to be positive).

29. (2, 6) $\theta \approx$ _____

30. (1, 7) $\theta \approx$ _____

31. (5, -2) $\theta \approx$ _____

_____ 32. A plane is flying due East and is located at the point (3, 5). It now must turn North and head to the point (5, 12). How many degrees must it turn?