Chapter 9 Practice Test 2

Name _____

In which quadrant are the following angles?

_____ 1. -100° _____ 2. 130° _____ 3. -300°

_____ 4. $\frac{5\pi}{3}$ _____ 5. $\frac{5\pi}{4}$ _____ 6. $-\frac{2\pi}{3}$

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

_____ 7. -210° and 120° _____ 8. 10° and 310°

_____ 9. $\frac{\pi}{5}$ and $-\frac{9\pi}{5}$ _____ 10. $\frac{\pi}{2}$ and $\frac{7\pi}{2}$

_____ 11. $-\frac{\pi}{2}$ and $\frac{3\pi}{2}$ _____ 12. -180° and 180°

Give the reference angle for each angle given.

_____ 13. 160° _____ 14. -120° _____ 15. 210°

_____ 16. $\frac{5\pi}{3}$ _____ 17. $\frac{5\pi}{6}$ _____ 18. $-\frac{2\pi}{3}$

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 (4, 3) Sin θ = _____ Cos θ = _____ Tan θ = _____

20. Coordinates (9, 40) Sin θ = _____ Cos θ = _____ Tan θ = _____

21. When cos $\theta = \frac{7}{25}$ and the terminal side of θ is in the 1st quadrant, find

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

22. When cos $\theta = \frac{10}{26}$ and the terminal side of θ is in the 1st quadrant, find

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

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

Degree	Radian	Point location
45		
120		
180		
210		
330		

24. In radians, what is 80°? _____

25. In degrees, what is $\frac{\pi}{90}$? _____

26. In radians, what is 4°?_____

27. In degrees, what is $\frac{11\pi}{18}$? _____

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).

28. (-2, 6) $\theta \approx$ _____

29. (3, 7) $\theta \approx$ _____

30. (4, -2) $\theta \approx$ _____

_____ 31. A plane is flying due East and is located at the point (2, 8). It now must turn North and head to the point (12, 18). How many degrees must it turn?