7-3 Additional Practice

Trigonometric Functions and Real Numbers

Find the sine and cosine of each angle.

1. 90°

2. 135°

3. 270°

4. $\frac{\pi}{6}$

5. $\frac{3\pi}{4}$

6. $\frac{5\pi}{6}$

Find the coordinate of the terminal point for each angle.

7. $\frac{2\pi}{3}$

8. $\frac{\pi}{2}$

9. $\frac{5\pi}{3}$

10. 315°

11. 210°

12. 240°

Solve.

13. What is the sin θ if cos $\theta = \frac{-6}{10}$ and θ is in Quadrant II?

14. What is the cos θ if the sin $\theta = \frac{-16}{20}$ and θ is in Quadrant III?

What is the tangent of each angle?

15. $\frac{11\pi}{6}$

16. $\frac{\pi}{4}$

17. $\frac{5\pi}{3}$

18. −750°

19. 30°

20. 135°

Find the secant, cosecant, and cotangent for each angle.

21. $\frac{\pi}{4}$

22. $\frac{\pi}{6}$

23. $\frac{3\pi}{4}$

24. 330°

25. 120°

26. 240°

27. Alejandro said the cotangent of 180° is 0. Is he correct? Explain.

28. Alex is standing at the 2 o'clock position on a circle in the center of a soccer field. He passes the ball to a player who is located at the 10 o'clock position. The radii to the positions of the two players forms a central angle of the circle. What are the degree and radian measures of the angle?