Math III **WS 6.3**

Angles in Radians / Degrees

Name_____

Period_____

Write each measure in radians. Express your answer in terms of π.

1. 45° **2.** 90° **3.** 30° **4.** 150° **5.** 180°

6. 240° **7.** 270° **8.** 300° **9.** 360° **10.** 40°

11. 80° **12.** 110° **13.** 160° **14.** 200° **15.** 220°

Write each measure in degrees.

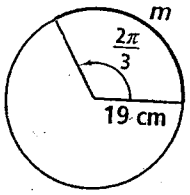
16. $\frac{\pi}{6}$ **17.** $\frac{3\pi}{4}$ **18.** 2π **19.** $\frac{4\pi}{3}$ **20.** $\frac{11\pi}{6}$

21. $\frac{2\pi}{9}$ **22.** $\frac{5\pi}{18}$ **23.** $\frac{7\pi}{15}$ **24.** $\frac{-5\pi}{9}$ **25.** $\frac{8\pi}{5}$

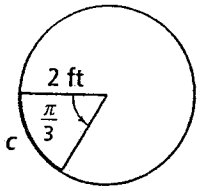
26. π **27.** $\frac{2\pi}{3}$

Use each circle to find the length of the indicated arc. Round your answer to the nearest tenth.

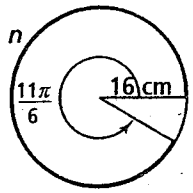
35.



36.



37.



38. A pendulum swings through an angle of 1.8 radians. The distance the tip of the pendulum travels is 32 inches. How long is the pendulum?