Name _____ Date _____

Practice 7.1: Angle Measures & Radians

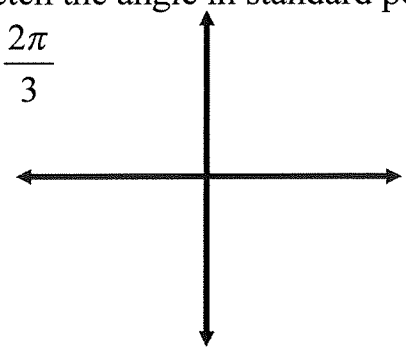
1. Determine what quadrant the terminal ray is in.

a. $\frac{5\pi}{4}$ **b.** $\frac{11\pi}{5}$ **c.** $-\frac{\pi}{12}$ **d.** $-\frac{7\pi}{6}$

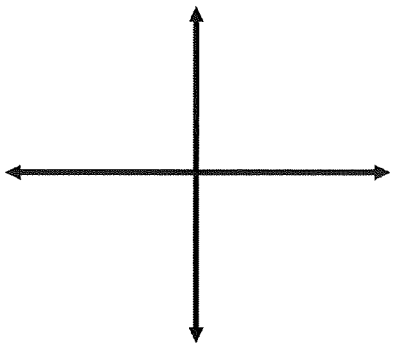
e. 291° **f.** -1000° **g.** -2 **h.** 6.1

2. Sketch the angle in standard position.

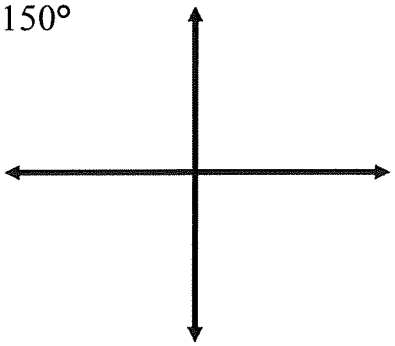
a. $\frac{2\pi}{3}$



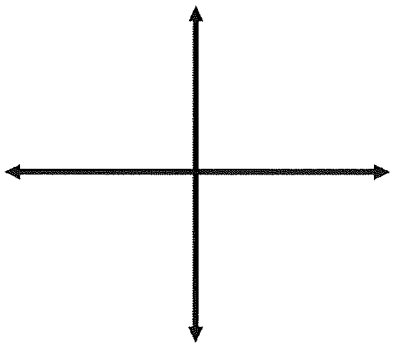
b. $-\frac{7\pi}{4}$



c. -150°

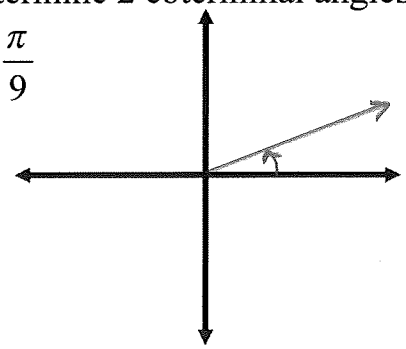


d. 480°

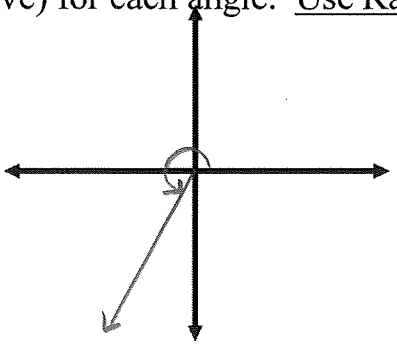


3. Determine 2 coterminal angles (1 positive & 1 negative) for each angle. Use Radians.

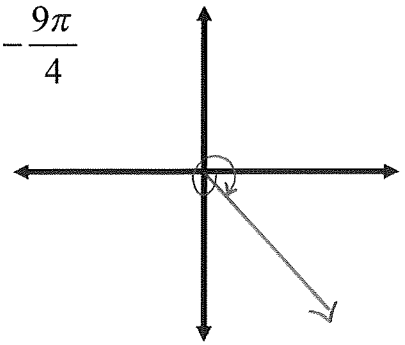
a. $\frac{\pi}{9}$



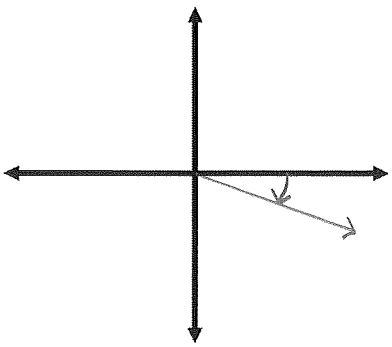
b. $\frac{4\pi}{3}$



c. $-\frac{9\pi}{4}$

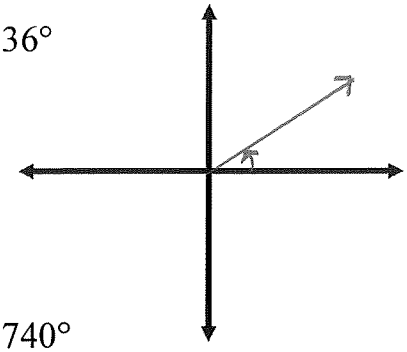


d. $-\frac{2\pi}{15}$

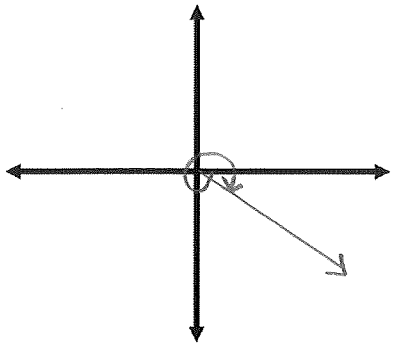


4. Determine 2 coterminal angles (1 positive & 1 negative) for each angle. Use Degrees.

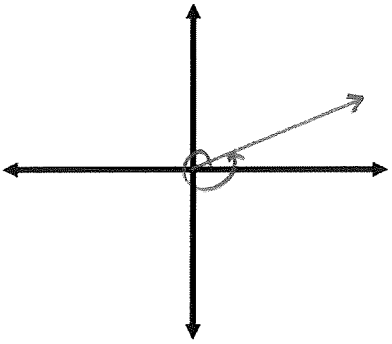
a. 36°



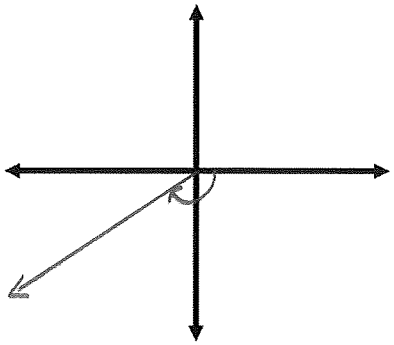
b. -390°



c. 740°



d. -150°



5. Find, if possible, the positive angle compliment and supplement of each angle.

a. $\frac{\pi}{3}$ **b.** $\frac{\pi}{10}$ **c.** 162° **d.** 1

6. Convert each angle to degrees without using a calculator.

a. $\frac{3\pi}{2}$ **b.** $\frac{7\pi}{6}$ **c.** $-\frac{11\pi}{30}$ **d.** $\frac{8\pi}{3}$

7. Convert each angle to radians without using a calculator.

a. 120° **b.** 315° **c.** -330° **d.** 36°

8. Convert each angle to degrees.

a. $\frac{\pi}{7}$ **b.** 3.5 **c.** $-\frac{15\pi}{8}$ **d.** 6.5π

9. Convert each angle to radians.

a. 112° **b.** -87.4° **c.** 0.95° **d.** 124° 12'