ACTIVITY 32 PRACTICE

Write your answers on notebook paper. Show your work.

Lesson 32-1

- **1.** Draw an angle in standard position for each of the following measures.
 - **a.** 200°
- **b.** 575°
- **c.** -225°
- **d.** -660°

e. $\frac{2\pi}{5}$

f. $-\frac{3\pi}{2}$

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

- **h.** $\frac{11\pi}{3}$
- **2.** Which angle is a coterminal angle with 140° ?
 - **A.** -140°
- **B.** 40°

 $\mathbf{C.}\ 400^{\circ}$

- **D.** 500°
- **3.** Which angle is a coterminal angle with -75° ?
 - **A.** 435°

B. -285°

C. 285°

- **D.** -645
- **4.** Which angle is *not* a coterminal angle with $\frac{5\pi}{4}$ radians?
 - **A.** $-\frac{3\pi}{4}$

- **B.** $-\frac{7\pi}{4}$
- **C.** $-\frac{11\pi}{4}$
- **D.** $\frac{13\pi}{4}$
- **5.** Give one positive and one negative angle that are coterminal with each of the following angles.
 - **a.** -65°
- **b.** 500°
- **c.** $-\frac{6\pi}{5}$

d. $\frac{8\pi}{3}$

- **6.** What is the reference angle for $\theta = 75^{\circ}$?
 - **A.** 15°

- **B.** 75°
- **C.** 105°

- **D.** 255°
- **7.** What is the reference angle for $\theta = \frac{8\pi}{5}$?
 - A. $\frac{\pi}{5}$

B. $\frac{2\pi}{5}$

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

- **D.** $\frac{8\pi}{5}$
- **8.** What is the reference angle for each value of θ ?
 - **a.** $\theta = -325^{\circ}$
- **b.** $\theta = 530^{\circ}$
- $\mathbf{c.} \ \theta = -\frac{12\pi}{5}$
- **d.** $\theta = \frac{7\pi}{4}$
- **9.** In which quadrant is the reference angle α equal to θ ?
- **10.** Find $\sin \theta$ and $\cos \theta$.
 - a. $\theta = -180^{\circ}$
- **b.** $\theta = 450^{\circ}$?
- **11.** Find sin θ and cos θ .

a.
$$\theta = 6\pi$$

b.
$$\theta = -\frac{7\pi}{2}$$

12. What are the sine and cosine for each value of θ ?

a.
$$\theta = 315^{\circ}$$

b.
$$\theta = -510^{\circ}$$

$$\mathbf{c.} \ \theta = -\frac{11\pi}{6}$$

$$\mathbf{d.} \ \theta = \frac{10\pi}{3}$$