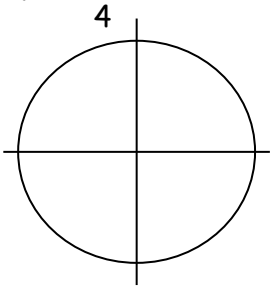
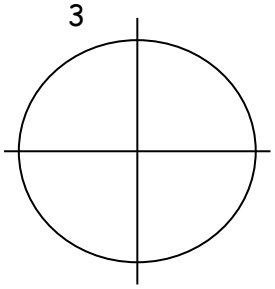
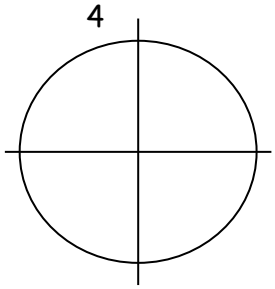
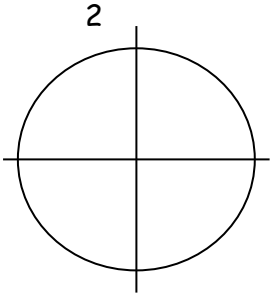
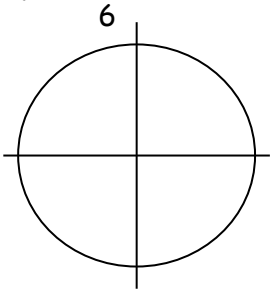
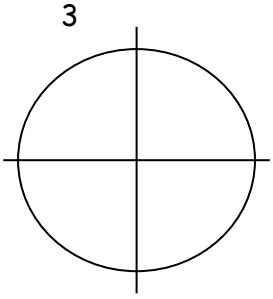
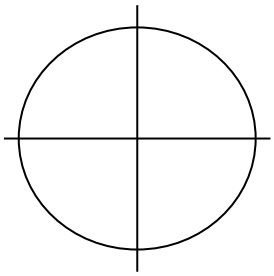
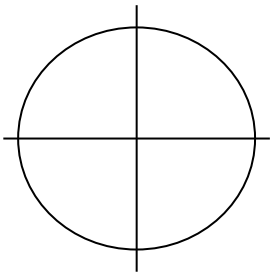
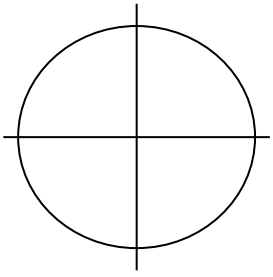
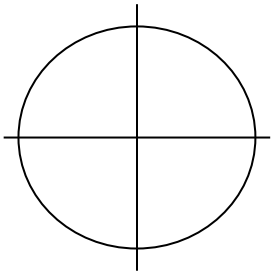
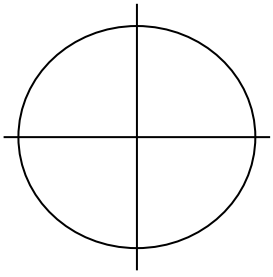
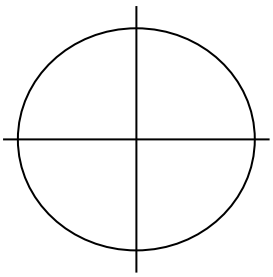
Advanced Functions HW **Name** _____
Trig Worksheet-Day 1 ***(Radians & Reference Angles)***

Determine the quadrant in which each angle lies.

1. $\frac{7\pi}{4}$	**2.** $\frac{11\pi}{4}$	**3.** $-\frac{5\pi}{6}$	**4.** $-\frac{13\pi}{3}$
5. -1	**6.** -2	**7.** 3	**8.** 2.25
9. 150°	**10.** 282°	**11.** 87.9°	**12.** -245.25°

Sketch each angle in standard position and state the reference angle (in the same measure as the given angle).

13. $\frac{3\pi}{4}$  Ref. $\angle$ = _____	**14.** $\frac{4\pi}{3}$  Ref. $\angle$ = _____	**15.** $-\frac{7\pi}{4}$  Ref. $\angle$ = _____	**16.** $\frac{-5\pi}{2}$  Ref. $\angle$ = _____
17. $\frac{11\pi}{6}$  Ref. $\angle$ = _____	**18.** $\frac{2\pi}{3}$  Ref. $\angle$ = _____	**19.** 4  Ref. $\angle$ = _____	**20.** -3  Ref. $\angle$ = _____
21. 150°  Ref. $\angle$ = _____	**22.** -270°  Ref. $\angle$ = _____	**23.** 405°  Ref. $\angle$ = _____	**24.** -450°  Ref. $\angle$ = _____

Trig Worksheet-Day 2 *(Coterminal Angles & Angle Conversions)*

Determine two coterminal angles (one positive and one negative) for each angle. Answers can vary. Answers need to be in the same measure as the given angle.

1. $\frac{\pi}{6}$	**2.** $\frac{2\pi}{3}$	**3.** $-\frac{9\pi}{4}$
4. $-\frac{2\pi}{15}$	**5.** 52°	**6.** -36°
7. 300°	**8.** -390°	**9.** 114°

Rewrite each angle in degree measure.

10. $\frac{3\pi}{2}$	**11.** $-\frac{7\pi}{6}$	**12.** -4π	**13.** $-\frac{13\pi}{60}$

Rewrite each angle in radian measure in the following ways:

a) in terms of π

b) the rounded decimal equivalent (round three decimal places)

14. 150°	**15.** -270°	**16.** -240°	**17.** 20°
a)	**a)**	**a)**	**a)**
b)	**b)**	**b)**	**b)**