Name: _____ period: _____ Date:_____

Turn this in at the end of class.

Use your unit circle to evaluate each expression below:

Part A

$\sin\left(\frac{\pi}{4}\right) =$ ____ $\sin\left(\frac{3\pi}{4}\right) =$ ____ $\sin\left(\frac{5\pi}{4}\right) =$ ____ $\sin\left(\frac{7\pi}{4}\right) =$ ____

$\cos\left(\frac{\pi}{4}\right) =$ ____ $\cos\left(\frac{3\pi}{4}\right) =$ ____ $\cos\left(\frac{5\pi}{4}\right) =$ ____ $\cos\left(\frac{7\pi}{4}\right) =$ ____

What do all the angles in the expressions above have in common?

What similarities or patterns do you notice in the answers?

Part B

$\sin\left(\frac{\pi}{6}\right) =$ ____ $\sin\left(\frac{5\pi}{6}\right) =$ ____ $\sin\left(\frac{7\pi}{6}\right) =$ ____ $\sin\left(\frac{11\pi}{6}\right) =$ ____

$\cos\left(\frac{\pi}{6}\right) =$ ____ $\cos\left(\frac{5\pi}{6}\right) =$ ____ $\cos\left(\frac{7\pi}{6}\right) =$ ____ $\cos\left(\frac{11\pi}{6}\right) =$ ____

$\sin\left(\frac{\pi}{3}\right) =$ ____ $\sin\left(\frac{2\pi}{3}\right) =$ ____ $\sin\left(\frac{4\pi}{3}\right) =$ ____ $\sin\left(\frac{5\pi}{3}\right) =$ ____

$\cos\left(\frac{\pi}{3}\right) =$ ____ $\cos\left(\frac{2\pi}{3}\right) =$ ____ $\cos\left(\frac{4\pi}{3}\right) =$ ____ $\cos\left(\frac{5\pi}{3}\right) =$ ____

What do all the angles in the expressions above have in common?

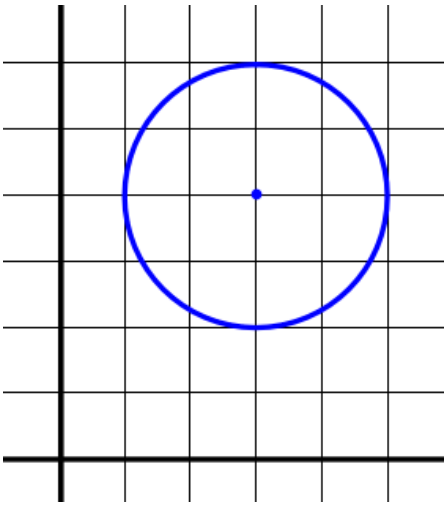
What similarities or patterns do you notice in the answers?

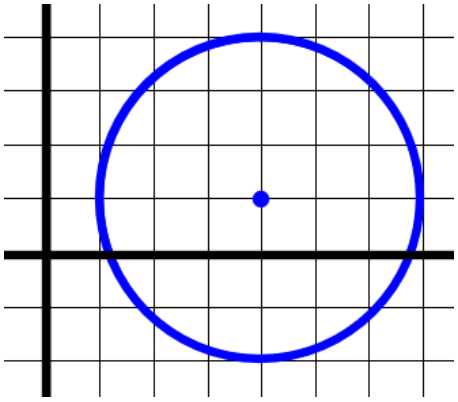
The equation for a circle is $(x-h)^2+(y-k)^2=r^2$, where (h,k) is the center of the circle and r is the radius.

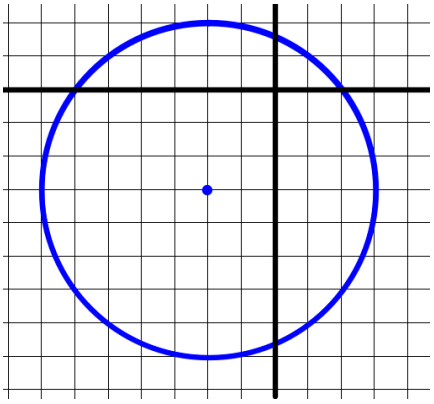
Find the center and radius for the following equations:

	Center	Radius
$(x-2)^2+(y-5)^2=9^2$	_____	_____
$(x-4)^2+(y-7)^2=25$	_____	_____
$(x+3)^2+(y-10)^2=64$	_____	_____
$(x+1)^2+(y+8)^2=49$	_____	_____

Find an equation for each of the circles below:







_____ _____ _____