Name: _____ Per: _____

PC 4 – Review

The first question on this test will be to complete the entire unit circle.

Convert from degrees to radians [2 pts]

1) 690°

Convert to from DMS to decimal Degrees [2 pts]

2) $17°33'42''$

Convert from radians to degrees [2 pts each]

3) $\frac{9\pi}{8}$

4) $\frac{-27\pi}{5}$

Find each of the following [2 pts each]

5) $sin^{-1}(\frac{1}{2})$

6) $\cot\left(sin^{-1}\left(-\frac{1}{3}\right)\right)$

7) $csc\left(tan^{-1}\left(-\frac{1}{3}\right)\right)$

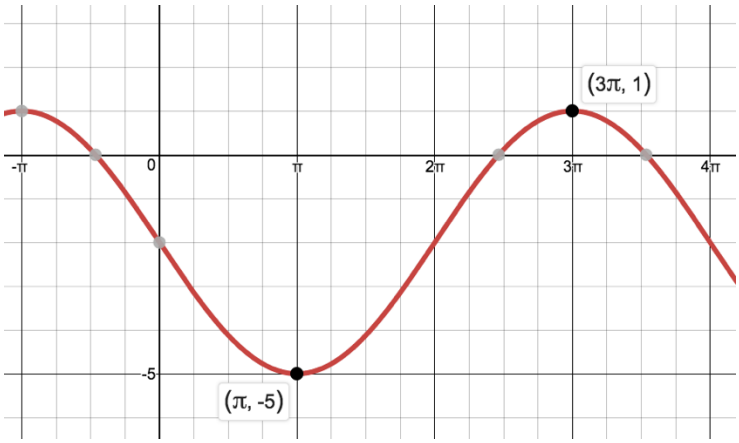
8) Graph <u>one cycle</u> of the function below.
[5 pts]

$$y = 4\cos\left(2\left(x + \frac{\pi}{2}\right)\right) - 3$$

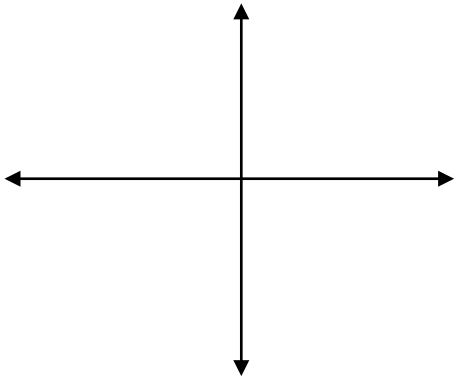
9) Use a graph to find all zeros on the interval $[0,2\pi]$ for the function below. [5 pts]

$y = -5\cos\left(3(x - \frac{\pi}{6})\right)$

10) Give two possible equations for this waveform, one as sine, one as cosine. [5 pts]



11) Given $\sin\theta = \frac{4}{7}$ and $\tan\theta < 0$, Draw a reference triangle and find the value of all six trig functions. [5 pts]



$\sin\theta$ =	$\csc\theta$ =
$\cos\theta$ =	$\sec\theta$ =
$\tan\theta$ =	$\cot\theta$ =

12) Find an equation of a negative cosine function with amplitude=6, period=π, passing through the point $\left(\frac{2\pi}{3}, 4\right)$. [6 pts]

A/B Level Extra Practice

13) Find $3\csc\left(\cos^{-1}\left(-\frac{2}{3}\right)\right)$

14) Graph one cycle of: $y = -4\sin\left(3\left(x + \frac{\pi}{6}\right)\right) - 3$