## Algebra 4

## Trig Graphing Review #2

## Write a sine and a cosine equation of these trigonometric functions. Try not to use a calculator!

Remember there are many possible equations for these functions. I have given just two and they may not be the same as yours. Use your calculator to verify your equations are the same as mine.

$a(x) = \sin x$	$b(x) = \cos x$
$a(x) = \cos (x - \pi/2)$	$b(x) = \sin (x + \pi/2)$
$c(\theta) = 2 \cos (\theta) - 1$	$d(\theta) = 3 \cos 5\theta$
$c(\theta) = 2 \sin (\theta + 90) - 1$	$d(\theta) = 3 \sin 5(\theta + 90)$
$e(x) = cos (x + \pi)$	$f(x) = \cos (x - \pi/6)$
$e(x) = sin (x - \pi/2)$	$f(x) = \sin (x + \pi/3)$
$g(x) = -\cos (x - \pi) + 1$	$h(x) = -\cos (x - 3\pi/4)$
$g(x) = -\sin (x - \pi/2) + 1$	$h(x) = \sin (x - 5\pi/4)$
$i(\theta) = \cos 2(\theta - 30) + 1$	$j(\theta) = \cos 4(\theta + 22.5) - 1$
$i(\theta) = \sin 2(\theta + 15) + 1$	$j(\theta) = -\sin 4(\theta) - 1$
$ \begin{aligned} k(x) &= 2 \cos \frac{1}{2}(x) - 2 \\ k(x) &= 2 \sin \frac{1}{2}(x + \pi) - 2 \end{aligned} $	$l(x) = -2 \cos \frac{1}{6}(x + \pi) - 15$ $l(x) = -2 \sin \frac{1}{6}(x + 4\pi) - 15$