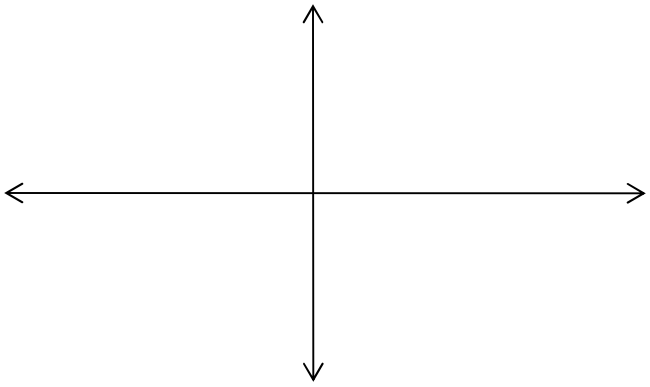
Name:_____ Date:_____ Period:_____

Sketching the graphs of sine/cosine functions

Directions: #1-8 Fill in the tables below. Then, use the points on the table to sketch each function on the coordinate plane. Label the axis.

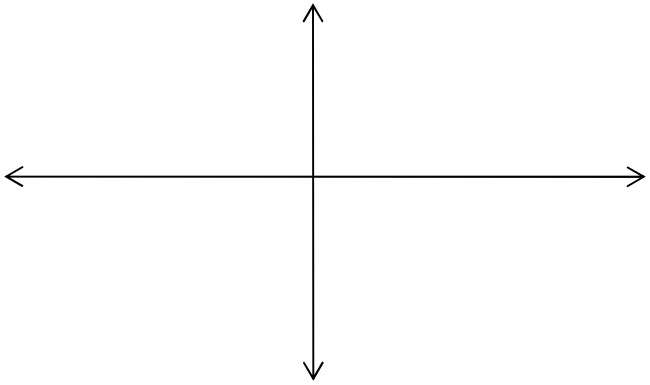
1) $y = 2\sin(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



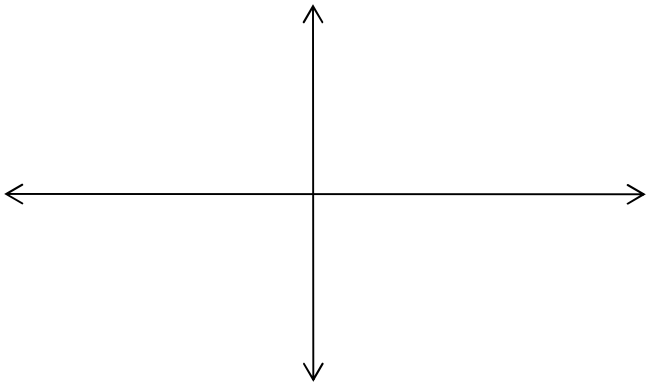
2) $y = -4\sin(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



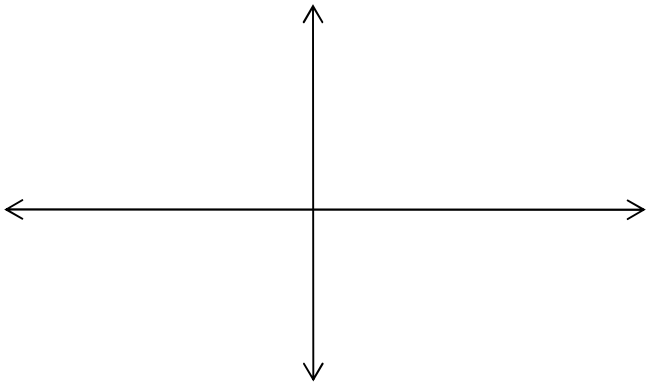
3) $y = \frac{-1}{3}\sin(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



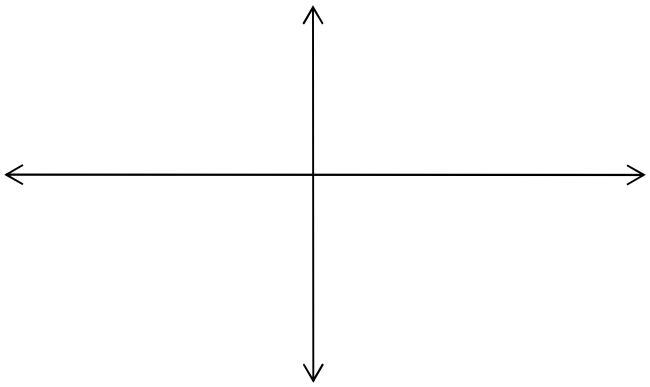
4) $y = \frac{1}{10}\sin(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



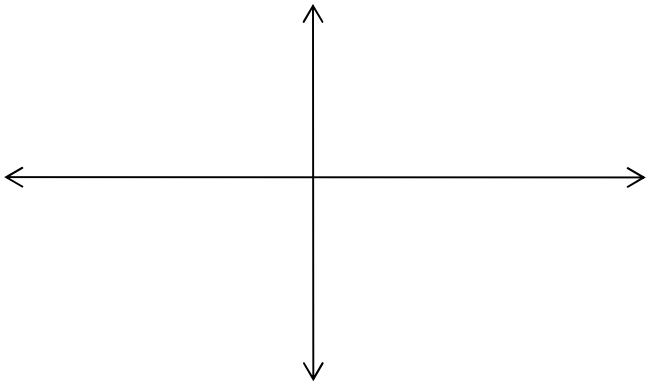
5) $y = 2\cos(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



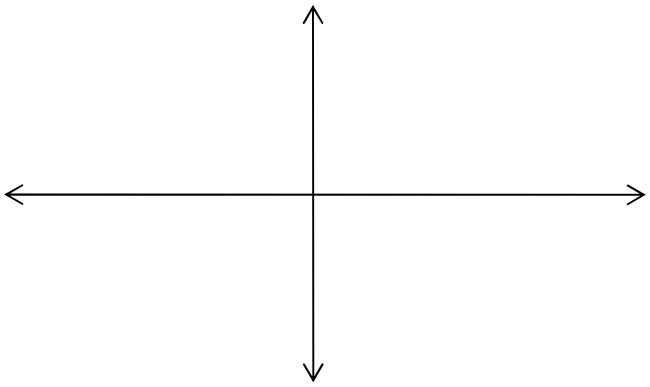
6) $y = -4\cos(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



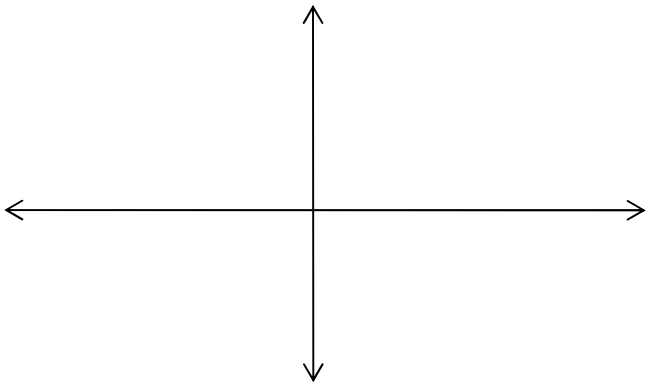
7) $y = \frac{-1}{3}\cos(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



8) $y = \frac{1}{10}\cos(x)$

x	-2π	$\frac{-3\pi}{2}$	$-\pi$	$\frac{-\pi}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
y									



9) The height of the wave from the x-axis to the top of a wave is called **amplitude**. What is the **amplitude** for each of the graphs above?

1)_____ 2)_____ 3)_____ 4)_____

5)_____ 6)_____ 7)_____ 8)_____