Integrated Math 3 Name: _____
Unit 5: Graphing & Modeling Trig. Functions
5.1 Worksheet Date:_____ Period:_____

Intro to Graphing Trig. Functions

1. Identify the amplitude, range, and period of the trigonometric functions below.

a. $y = 7\sin 2\pi x$ b. $y = \frac{1}{2}\cos\frac{3}{2}x$ c. $y = -4\sin 4x$

2. Write sine and cosine functions that have the following characteristics

a. A sine function that has an amplitude of 4

b. A cosine function that has an amplitude of 8

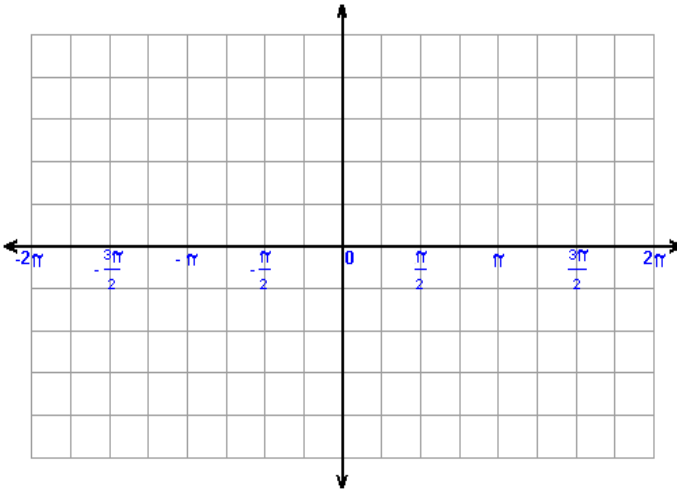
c. A sine function that has a period of 2π

d. A cosine function that has a period of 8π

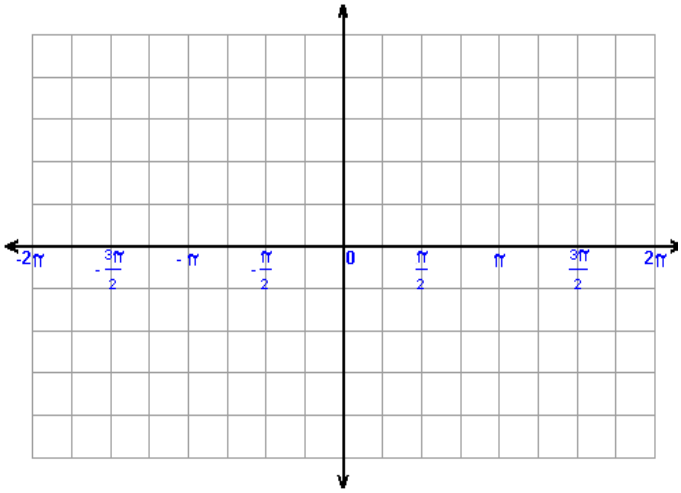
e. A sine function that has a period of $\frac{1}{2}\pi$ and an amplitude of 3

3. Graph the sine and cosine functions with period and amplitude transformations.

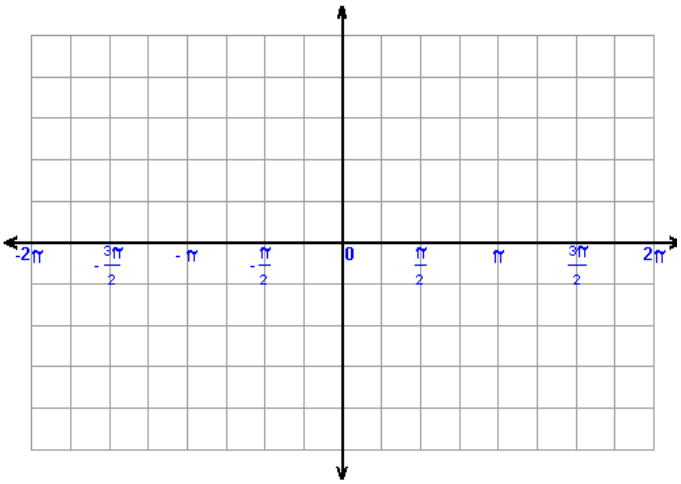
a. $y = 4\sin x$



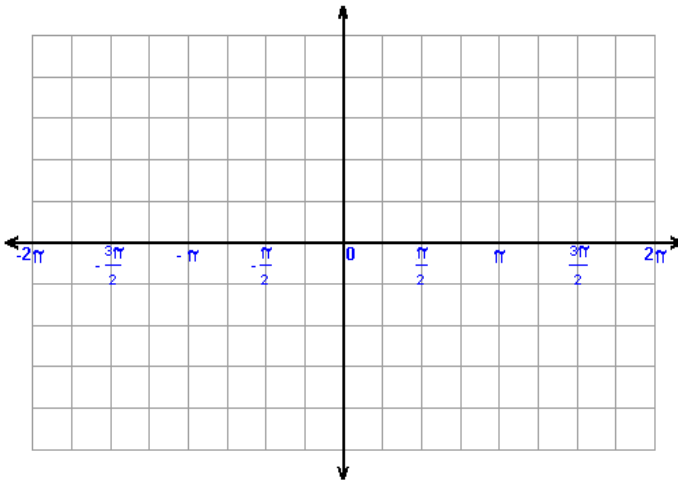
b. $y = -2\cos x$



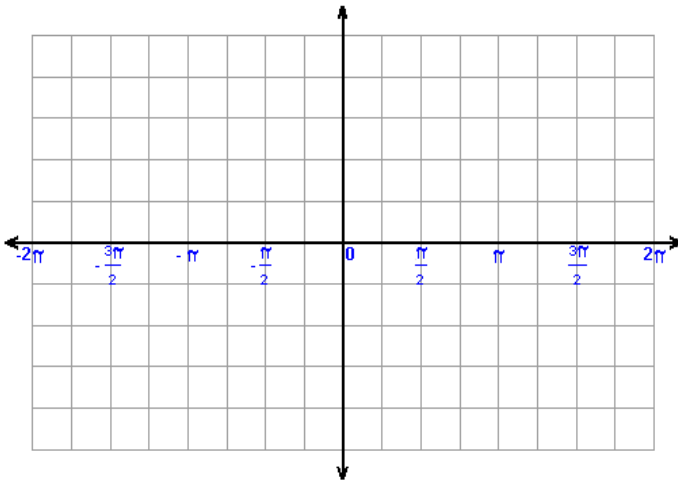
c. $y = 3\cos 2x$



d. $y = \cos 2x$



e. $y = -4\sin 4x$



f. $y = 3\cos\frac{1}{2}x$