Sine and Cosine Graphs   Name: _____ A#_____

Using our approximations for coordinates on a unit circle we will create the parent graph for all sine and cosine functions.

Sine Parent Function $y = sin(\theta)$

Think about how you got the coordinates on the unit circle.

1) For the sine function, what does the input value or independent variable represent?

2) For the sine function, what does the output value or dependent variable represent?

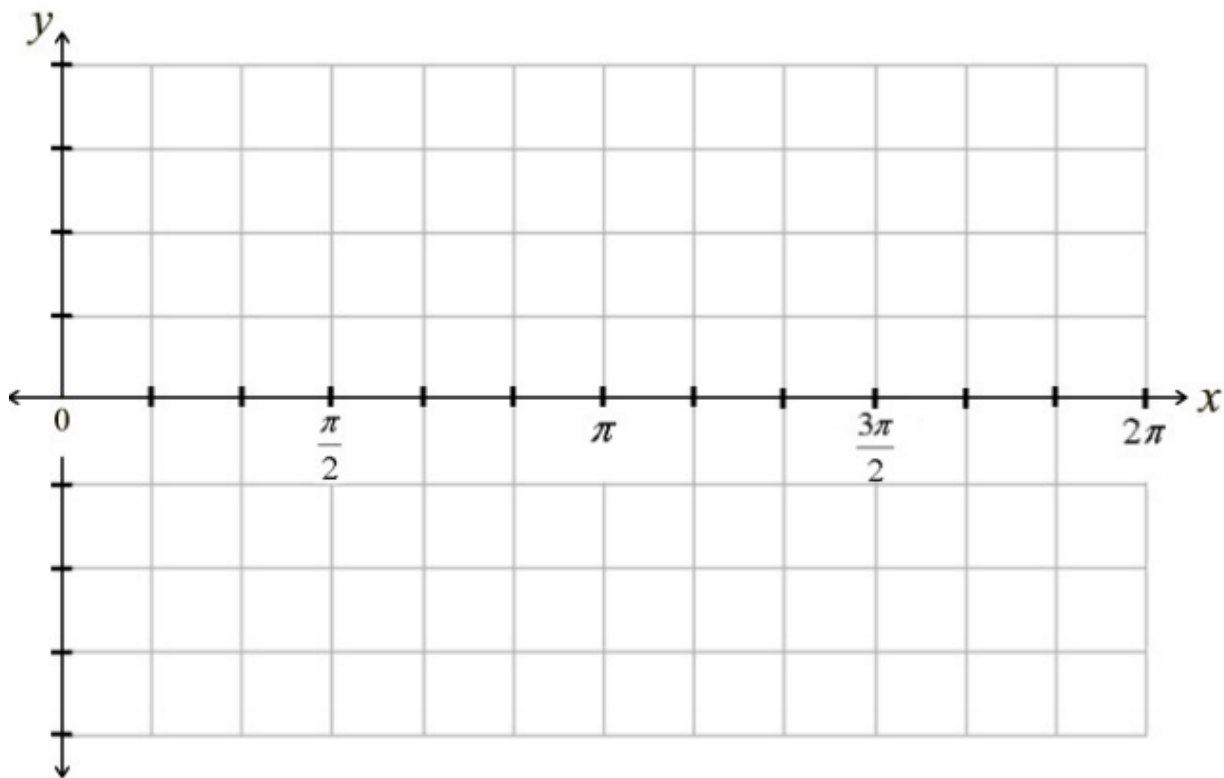3) Use your unit circle coordinates and your answers from #1-2 to create a graph of the sine function.
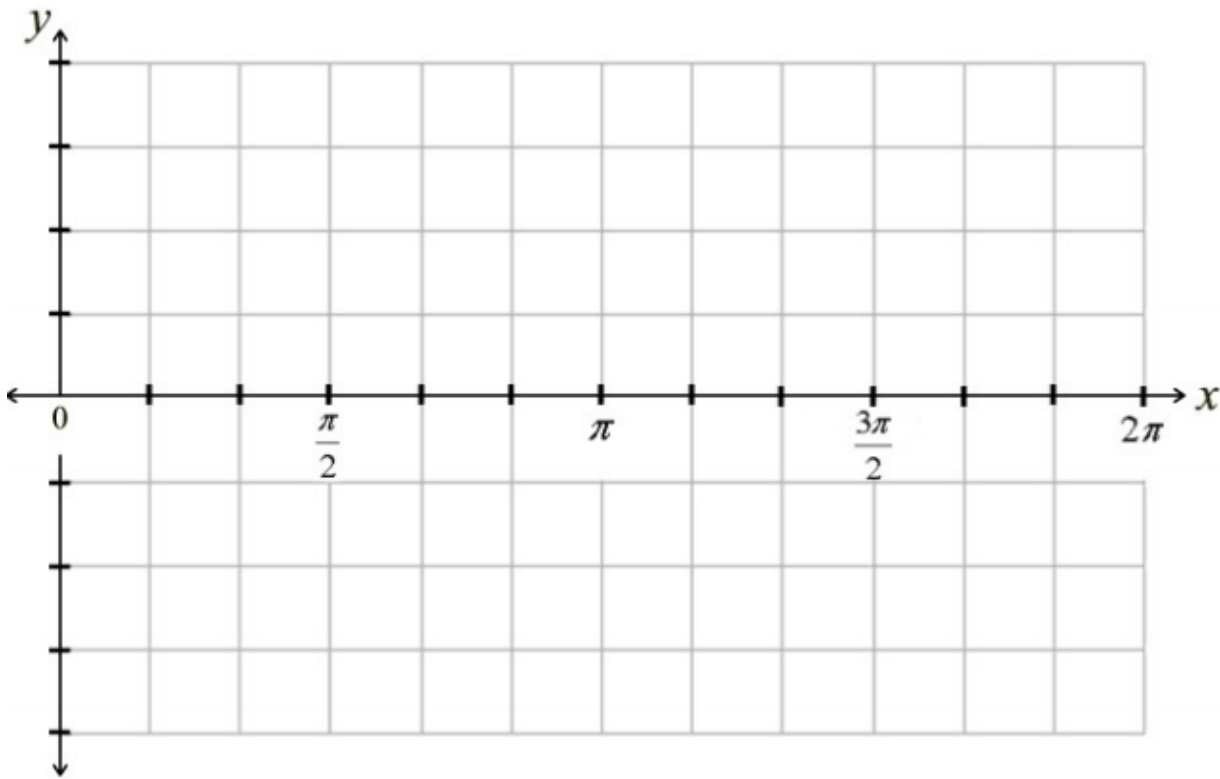
4) Identify the key features listed below for this graph.

Domain:	Range:
Maximum Coordinate(s):	Minimum Coordinate(s):
Interval(s) of Increase	Interval(s) of Decrease:
x-intercept(s):	y-intercept:

Cosine Parent Function $y = cos(\theta)$

Think about how you got the coordinates on the unit circle.

5) For the cosine function, what does the input value or independent variable represent?

6) For the cosine function, what does the output value or dependent variable represent?

7) Use your unit circle coordinates and your answers from #5-6 to create a graph of the cosine function.

8) Identify the key features listed below for this graph.

Domain:	Range:
Maximum Coordinate(s):	Minimum Coordinate(s):
Interval(s) of Increase	Interval(s) of Decrease:
x-intercept(s):	y-intercept:

9) Compare and Contrast the key features of the sine and cosine parent function. Be as detailed as possible.