

NOTES SAMPLE PROBLEMS COSINE FUNCTIONS

Standard Form: $y = a \cos(bx - c) + d$

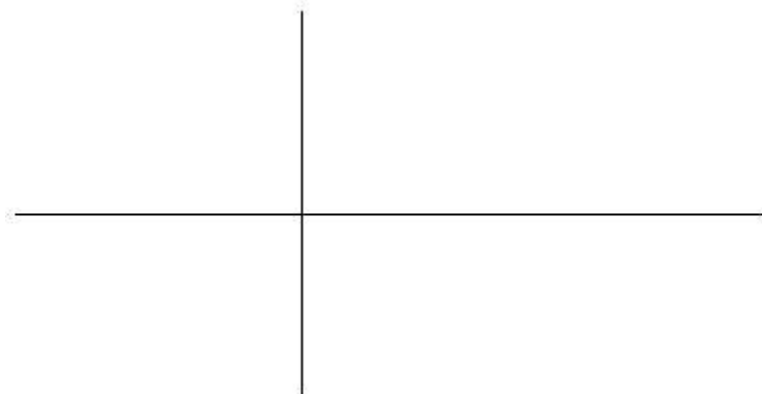
Parent Function $y = \cos x$

Amplitude:

Period:

Phase Shift:

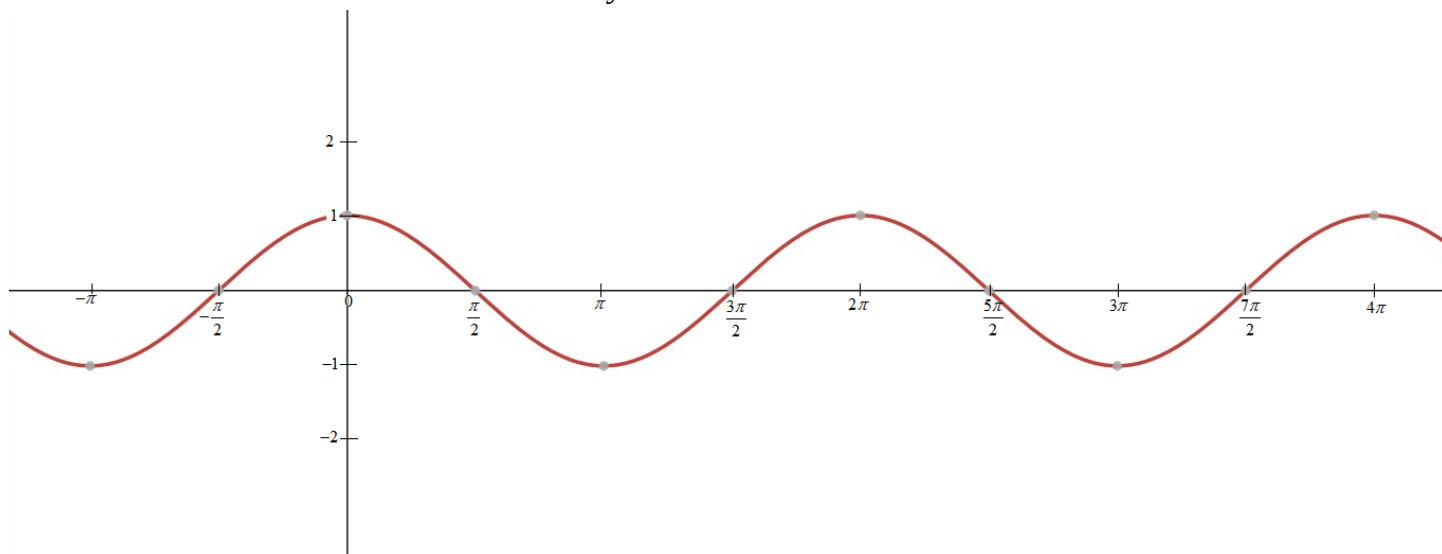
Initial Interval:



Practice Problems: Graph each of the following on the same x and y axis as the parent function shown. The objective is to see the difference in the two functions, so both need to be on the same plane.

1.

$$y = 2 \cos x$$



Amplitude:

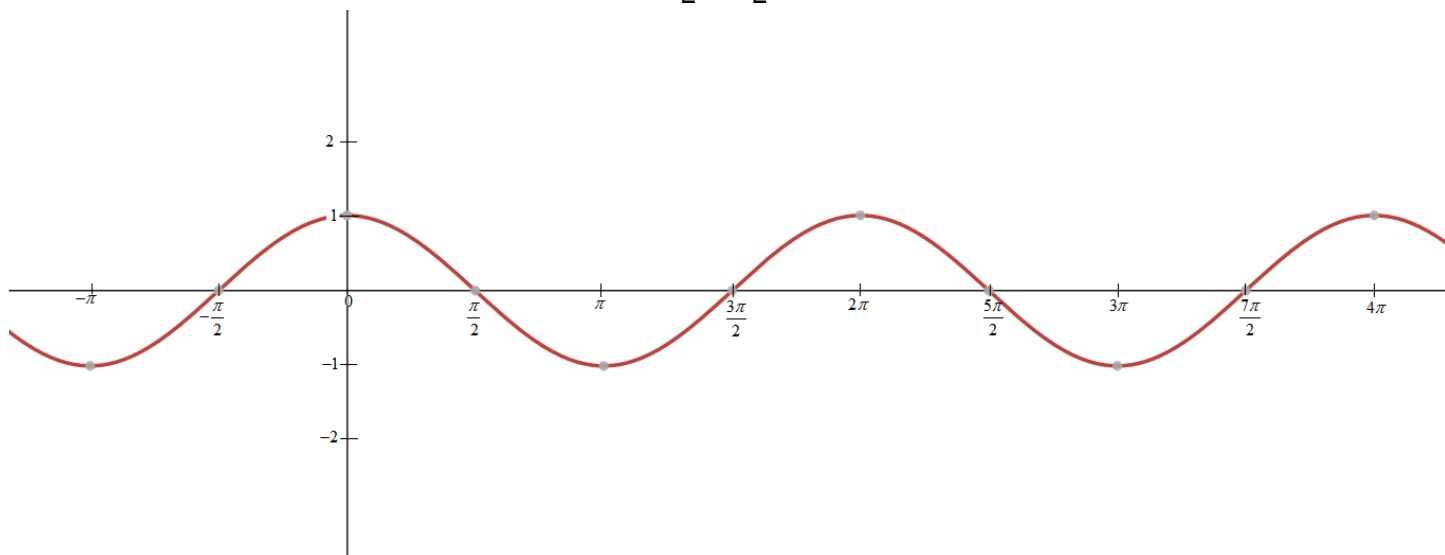
Period:

Phase Shift:

Initial Interval:

2.

$$y = -\frac{1}{2} \cos \frac{x}{2}$$



Amplitude:

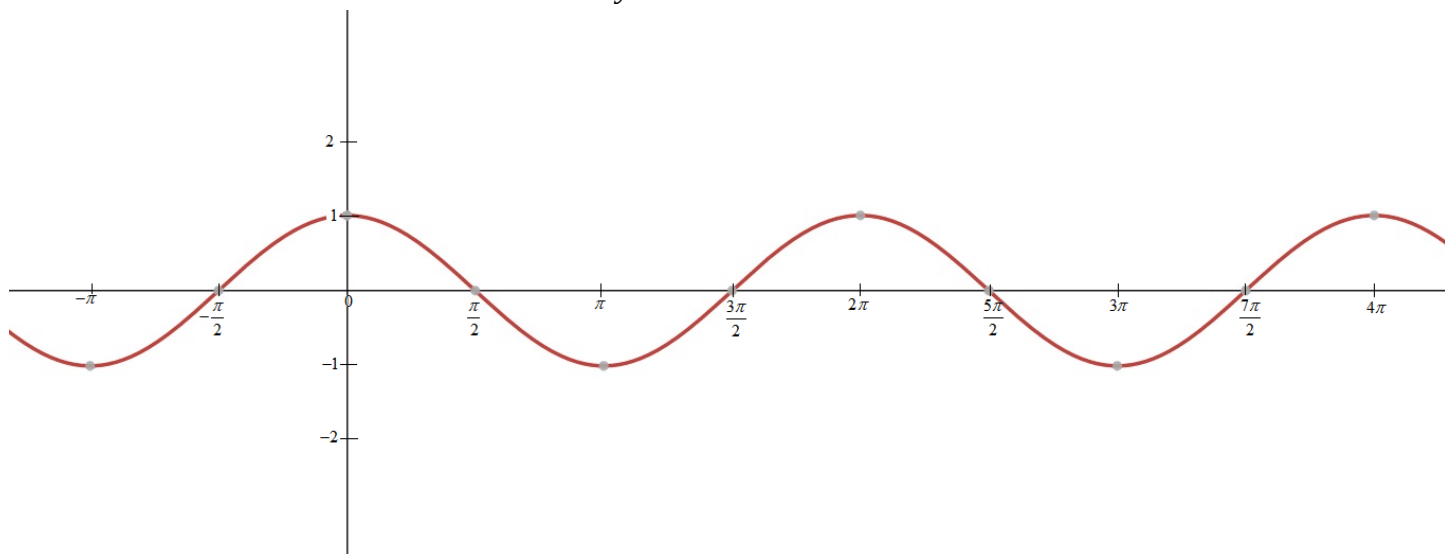
Period:

Phase Shift:

Initial Interval:

3.

$$y = \cos 4x$$



Amplitude:

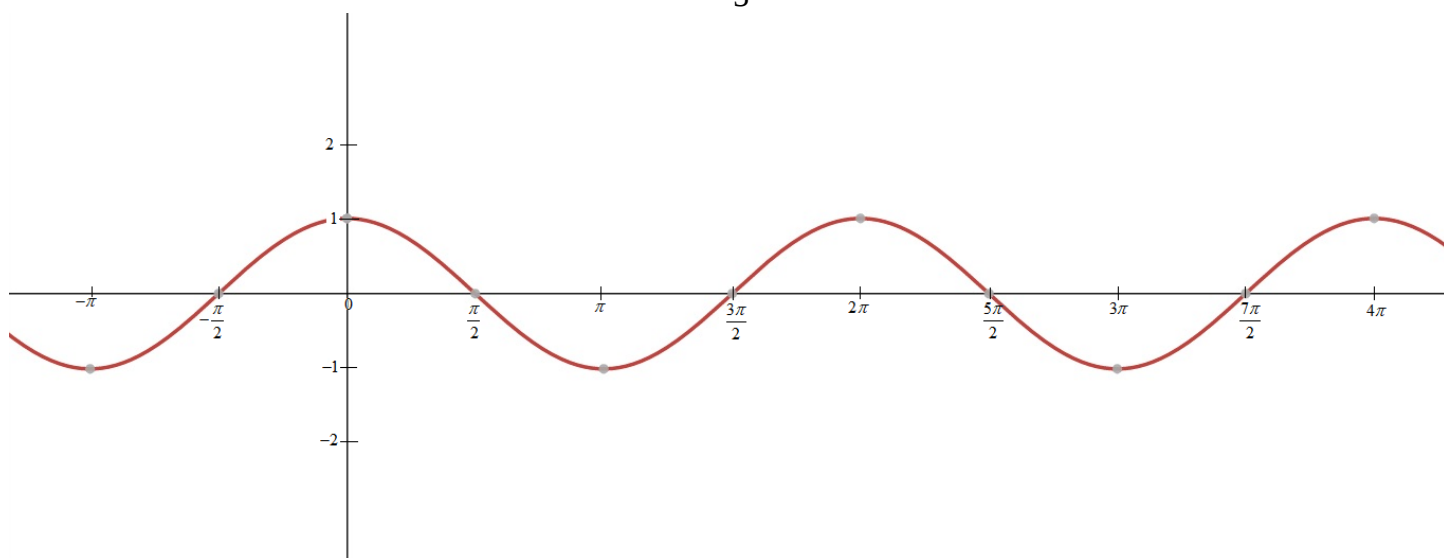
Period:

Phase Shift:

Initial Interval:

4.

$$y = 2 \cos \frac{x}{3}$$



Amplitude:

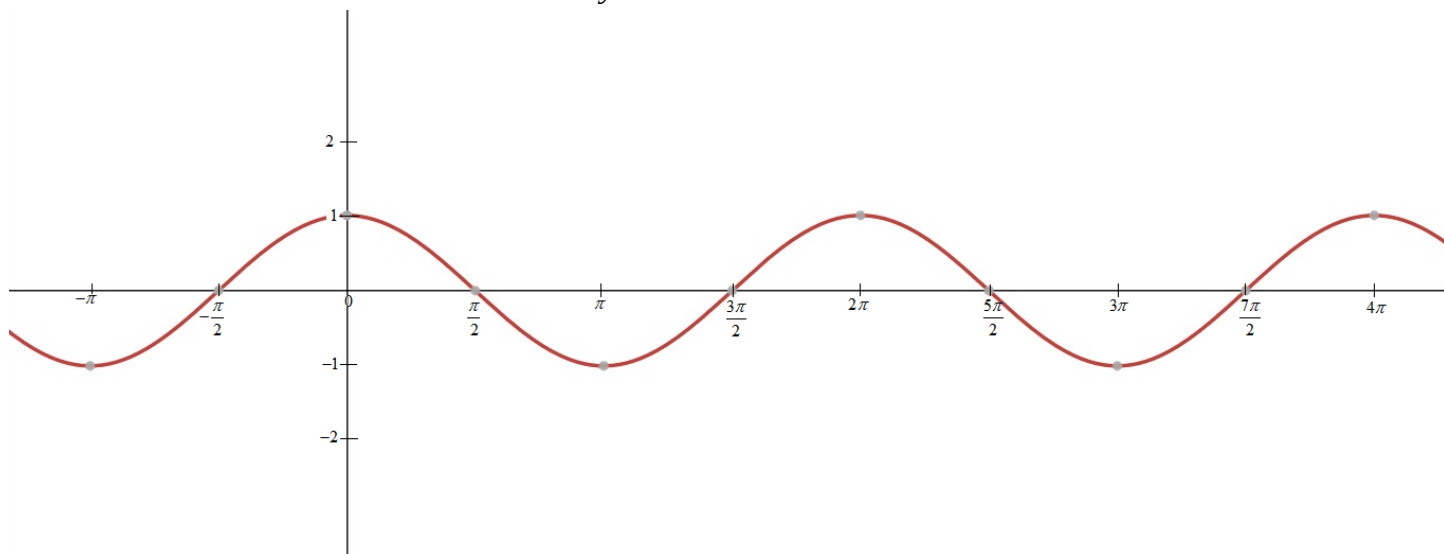
Period:

Phase Shift:

Initial Interval:

5.

$$y = -3 \cos 2x$$



Amplitude:

Period:

Phase Shift:

Initial Interval: