

Trigonometry 5.1: Transformations of the Graphs of Trigonometric Functions

For each trigonometric function:

-Graph the parent function.

-Give the amplitude, period, phase shift, and vertical shift for the given function.

-Graph the function.

1) $y = 3\sin(x)$

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

3) $y = 2\sin(x - \pi)$

Amplitude:

Period:

Phase Shift:

Vertical Shift:

Amplitude:

Period:

Phase Shift:

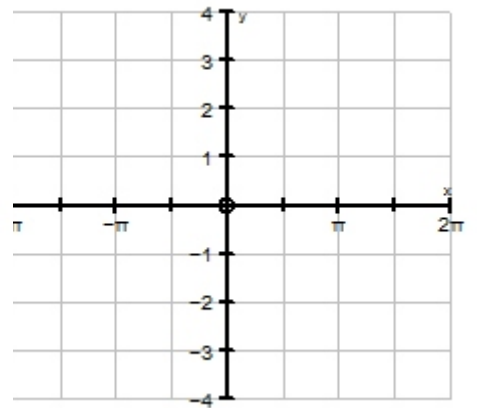
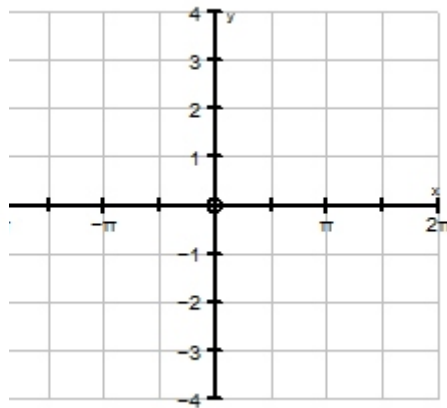
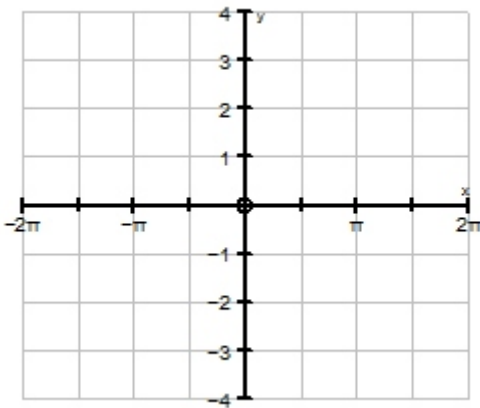
Vertical Shift:

Amplitude:

Period:

Phase Shift:

Vertical Shift:



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

5) $y = 3\sin(4x)$

6) $y = 2\sin(x + \pi/2)$

Amplitude:

Period:

Phase Shift:

Vertical Shift:

Amplitude:

Period:

Phase Shift:

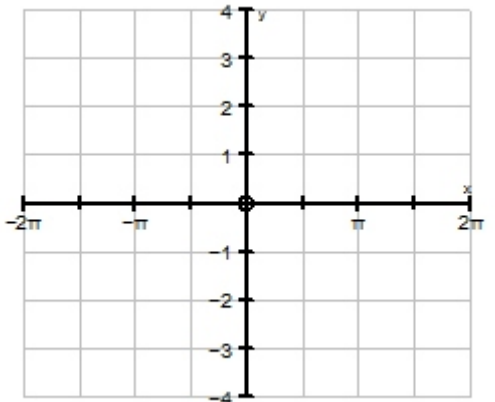
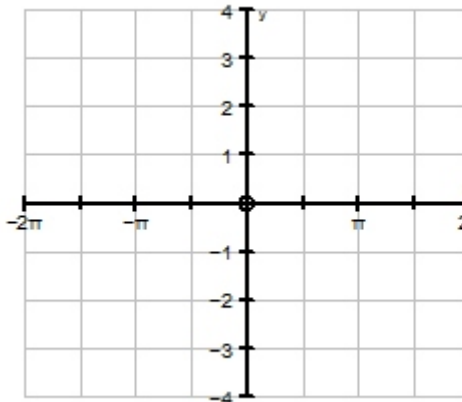
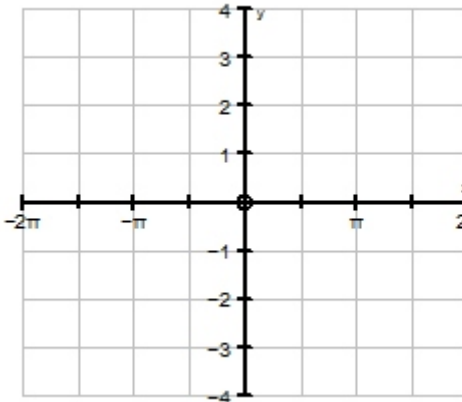
Vertical Shift:

Amplitude:

Period:

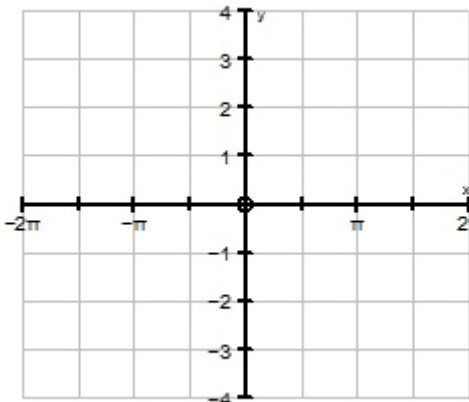
Phase Shift:

Vertical Shift:



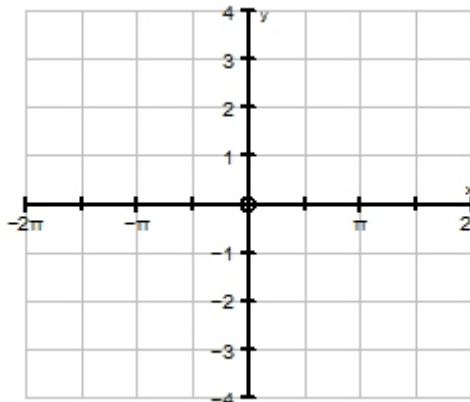
7) $y = \tan(x) + 1$

Amplitude:
 Period:
 Phase Shift:
 Vertical Shift:



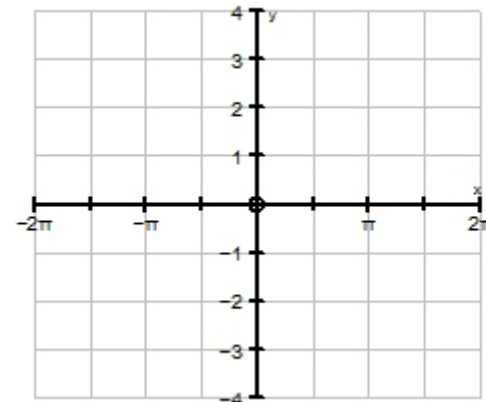
8) $y = -3\cos(x + \pi)$

Amplitude:
 Period:
 Phase Shift:
 Vertical Shift:



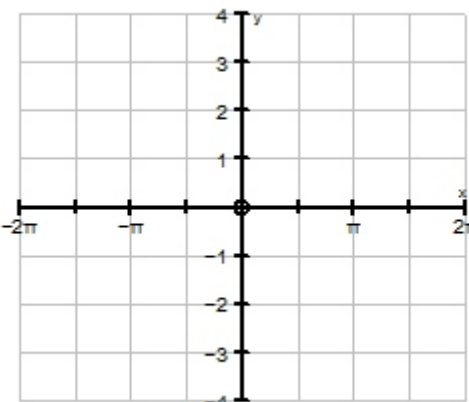
9) $y = -\sin(x/2)$

Amplitude:
 Period:
 Phase Shift:
 Vertical Shift:



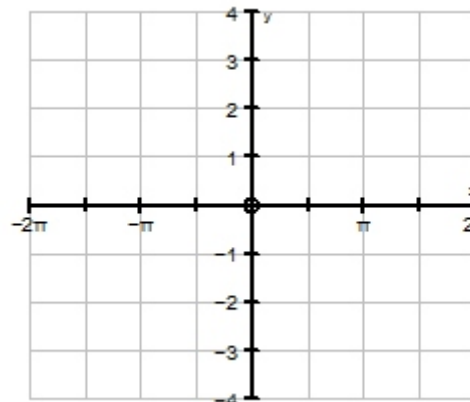
10) $y = 2\cos(x) + 1$

Amplitude:
 Period:
 Phase Shift:
 Vertical Shift:



11) $y = \tan(x + \pi/2)$

Amplitude:
 Period:
 Phase Shift:
 Vertical Shift:



12) $y = \sin(2x - \pi) - 2$

Amplitude:
 Period:
 Phase Shift:
 Vertical Shift:

