Name: _____ Date: _____

Learning Goal 5.1	Graphing primary trigonometric functions, including transformations and characteristics

Phase Shift **Vertical Displacement**

Example Complete the table for each of the following functions.

Function	Period	Amplitude	Vertical Displacement	Phase Shift	Maximum	Minimum
$y = \sin x + 10$						
$y = \sin\left(x - \frac{\pi}{7}\right)$						
$y = \sin\left(x + \frac{5\pi}{3}\right) - 2$						
$y = \cos x - 15$						
$y = \cos(x - 3)$						
$y = \cos\left(x + \frac{\pi}{4}\right) + 4$						

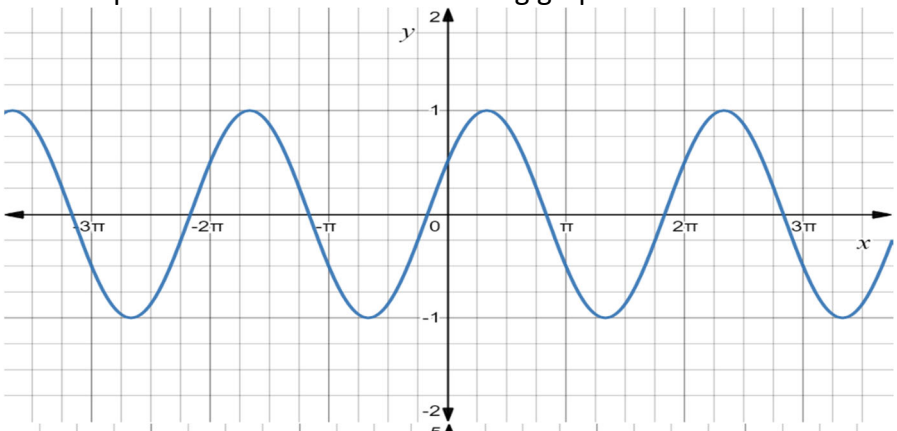
Example Complete the table below.

Function	Period	Amplitude	Vertical Displacement	Phase Shift	Max.	Min.	Equation
$\sin$	2π	1	$3\uparrow$	$2\rightarrow$			
$\cos$	2π			$\frac{\pi}{4}\leftarrow$	6	4	
$\sin$	2π	2	$3.5\downarrow$	none			
$\cos$	π	1	none	$60^\circ\rightarrow$			

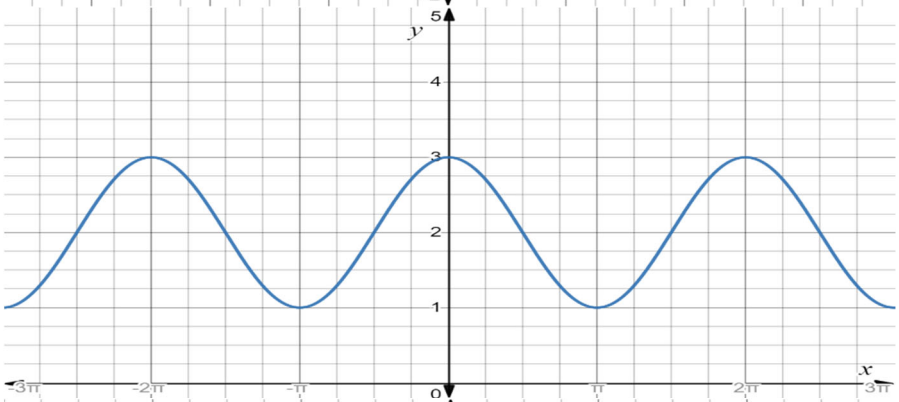
Assignment p. 250 # 1 – 9, 11, 12, 14 – 16, 26, 27, C2 Quiz Next Day!

Example Write an equation for each of the following graphs.

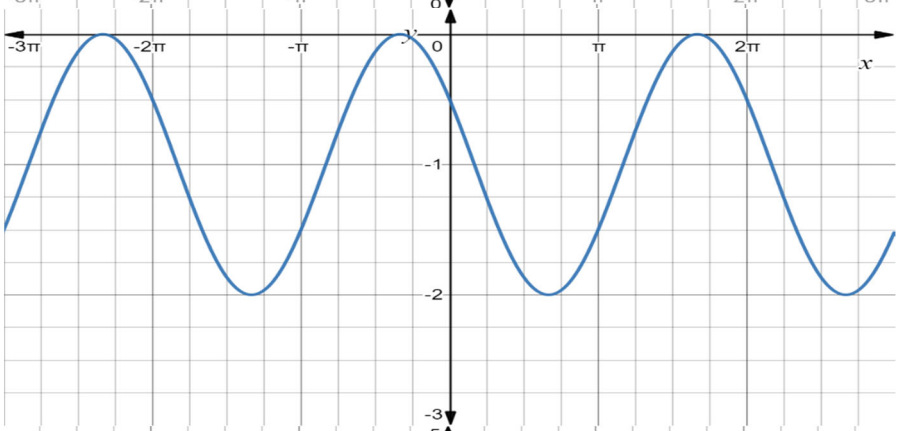
a.



b.



c.



d.