Name: _____   Date: _____

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

.

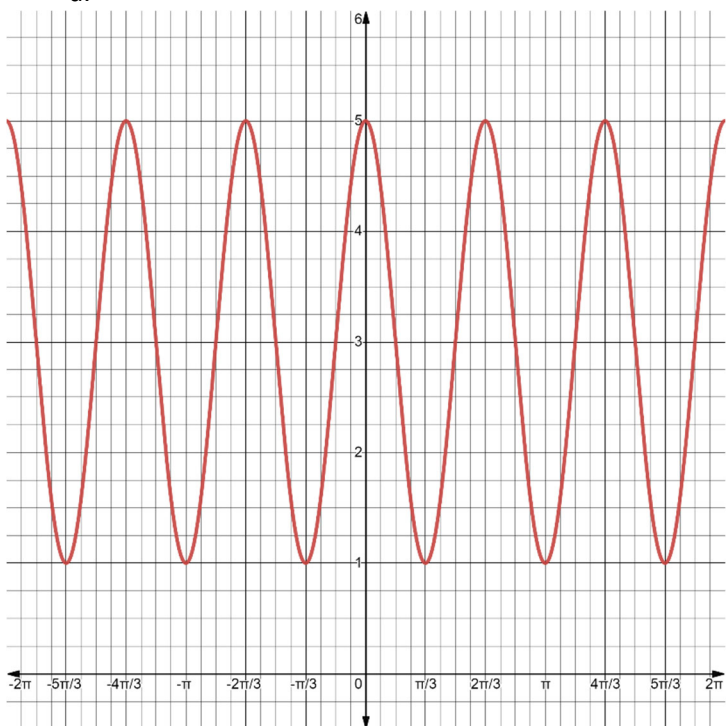**More Questions – Solutions**

1. Fill out the table for the function $y = 3\sin(2\pi x - 8) - 2$.

Vertical Displacement   Amplitude   Max   Min

       $2\downarrow$ 3 1 -5

Period   Phase Shift   Period Start   Period End

       1 $\dfrac{4}{\pi} \rightarrow$ $\dfrac{4}{\pi}$ $\dfrac{4 + \pi}{\pi}$
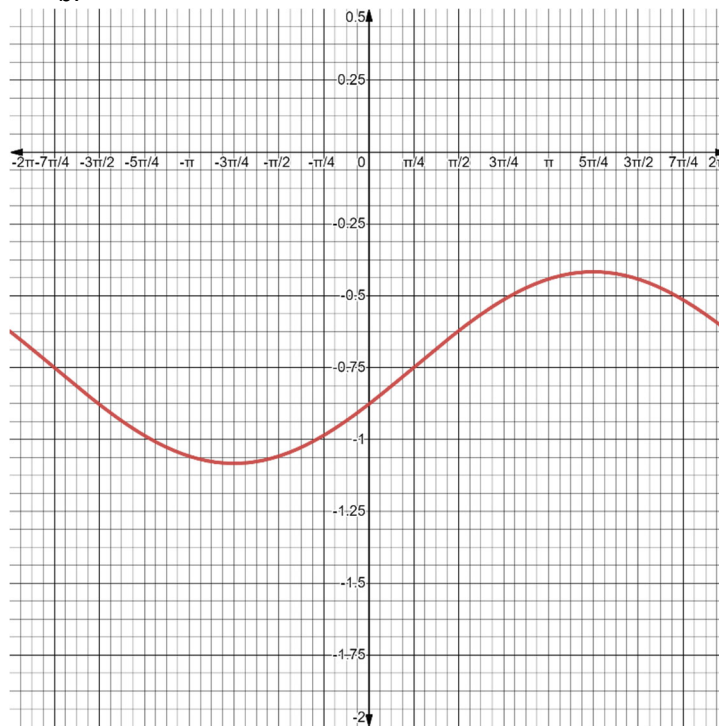
2. Find an equation for each of the following functions:
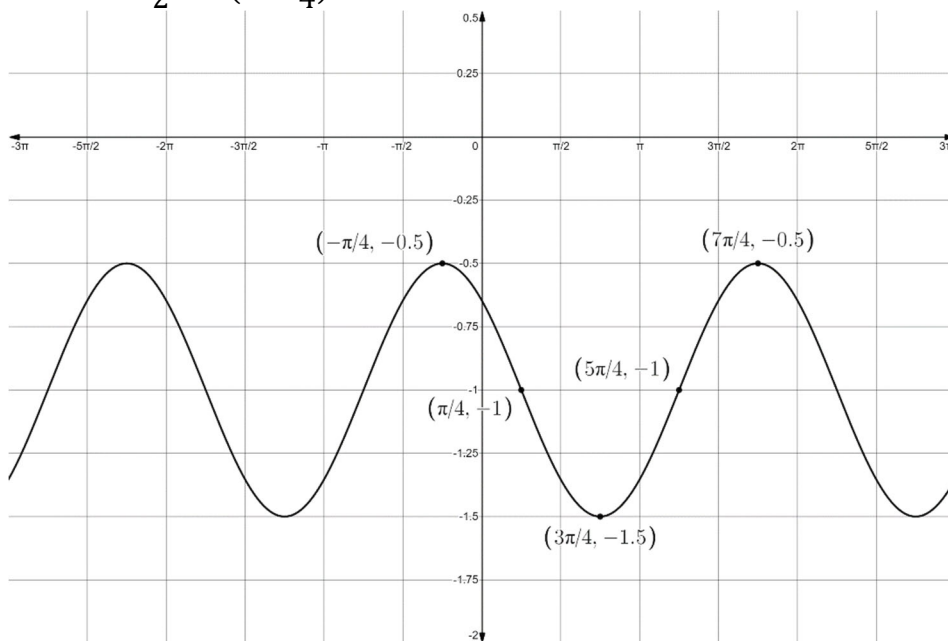
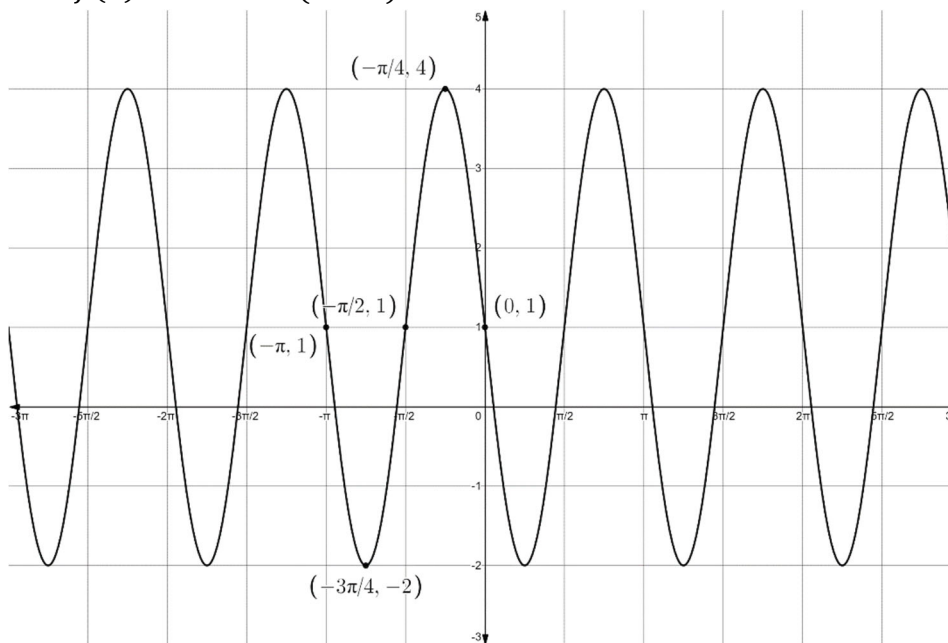a.

$$y = 2\sin 3\left(x - \frac{\pi}{2}\right) + 3$$

b.

$$y = \frac{1}{3}\cos\frac{1}{2}\left(x - \frac{5\pi}{4}\right) - \frac{3}{4}$$

3. Sketch two cycles of the graph of the functions below. State the coordinates of 5 points on the graph.

a. $y = \dfrac{1}{2}\cos\left(x + \dfrac{\pi}{4}\right) - 1$

b. $f(x) = -3\sin 2(x + \pi) + 1$

c. $g(x) = \dfrac{3}{2}\sin\dfrac{2\pi}{5}(x - 4)$

$(0.25, 1.5)$

$(-1, 0)$ $(1.5, 0)$ $(4, 0)$

$(2.75, -1.5)$