

7-4 BASIC GRAPHS OF SINE AND COSINE HOMEWORK

FLUENCY

1. On the grid below, sketch the graphs of each of the following equations based on the basic sine function.

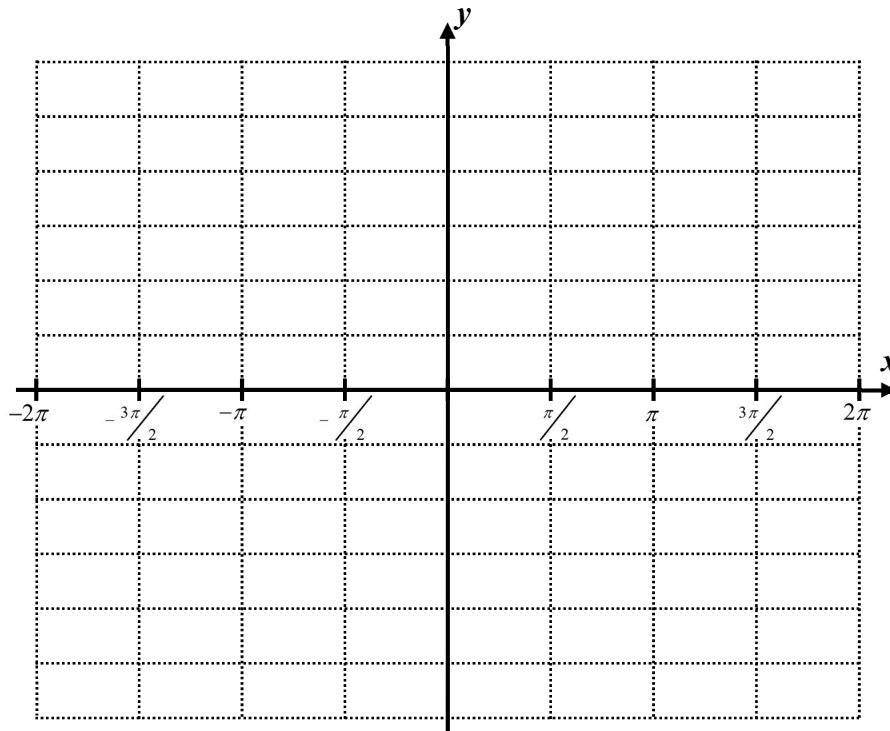
$$y = \sin(x)$$

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

$$y = -\sin(x)$$

$$y = -5\sin(x)$$

$$y = \frac{7}{2}\sin(x)$$



2. On the grid below, sketch the graphs of each of the following equations based on the basic cosine function.

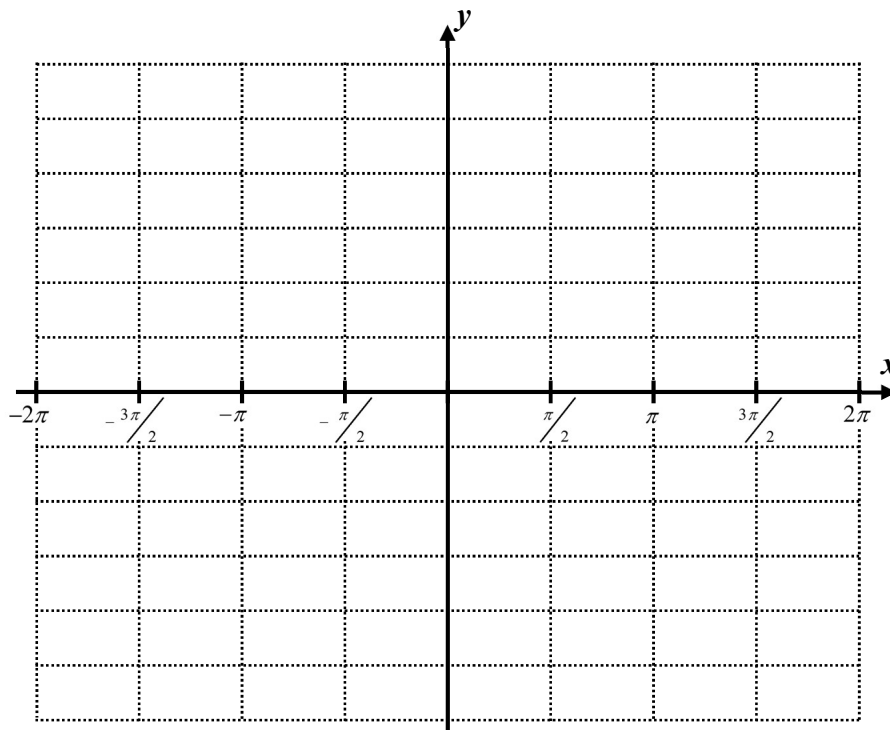
$$y = \cos(x)$$

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

$$y = -3\cos(x)$$

$$y = 2.5\cos(x)$$

$$y = -5.5\cos(x)$$



3. Which of the following represents the *range* of the trigonometric function $y = 7 \sin(x)$?

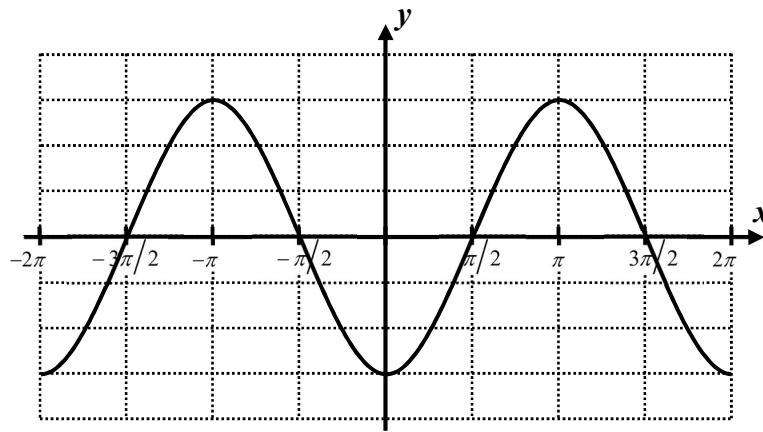
- (1) $(-7, 7)$ (3) $[0, 7)$
 (2) $[-7, 7]$ (4) $(-7, 7]$

4. Which of the following is the period of $y = \cos(x)$?

- (1) π (3) 2π
 (2) 2 (4) $\frac{3\pi}{2}$

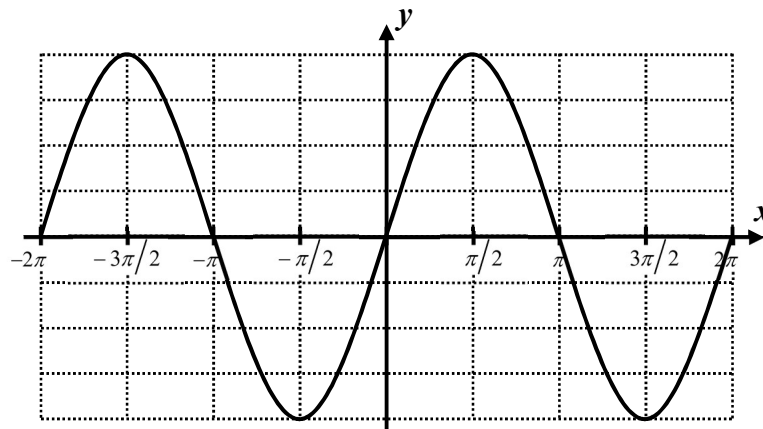
5. Which of the following equations describes the graph shown below?

- (1) $y = 3 \cos(x)$
 (2) $y = -3 \cos(x)$
 (3) $y = 3 \sin(x)$
 (4) $y = -3 \sin(x)$



6. Which of the following equations represents the periodic curve shown below?

- (1) $y = 4 \cos(x)$
 (2) $y = -4 \cos(x)$
 (3) $y = 4 \sin(x)$
 (4) $y = -4 \sin(x)$



7. Which of the following lines when drawn would *not* intersect the graph of $y = 6 \sin(x)$?

- (1) $x = 8$ (3) $y = -4$
 (2) $x = 3$ (4) $y = 9$

