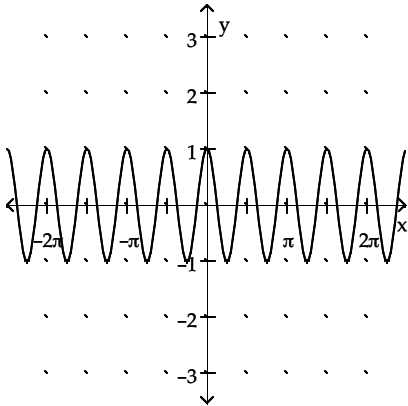


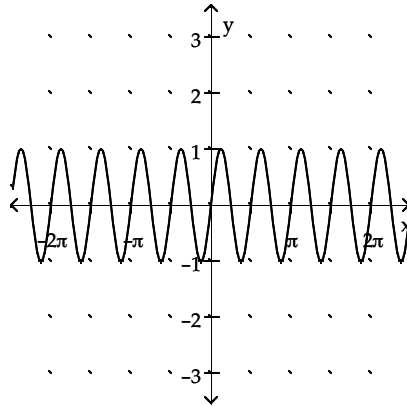
Match the function with its graph.

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

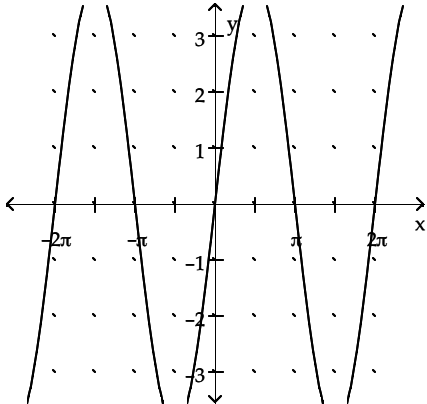
A)



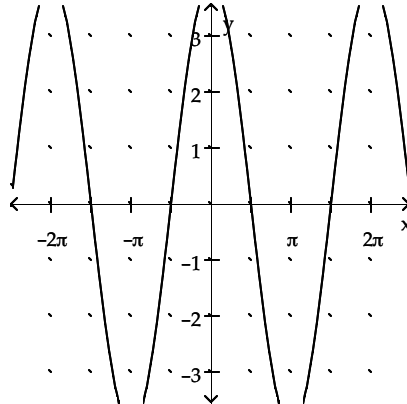
B)



C)



D)



Write the equation of a sine function with the given characteristics.

- 2) Amplitude: 4
 Period: 3π

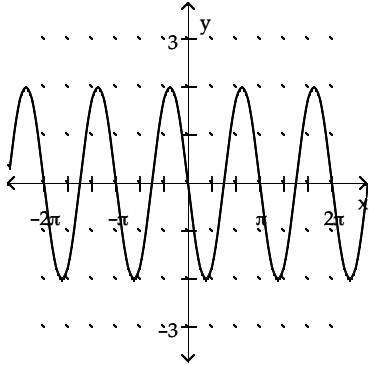
Solve.

- 3) The current I , in amperes, flowing through a particular ac (alternating current) circuit at time t seconds is
 $I = 240 \sin(70\pi t)$
 What is the period and amplitude of the current?
- 4) For what numbers x , $0 \leq x \leq 2\pi$, does $\cos x = 1$?
- 5) For what numbers x , $0 \leq x \leq 2\pi$, does $\sin x = -1$?

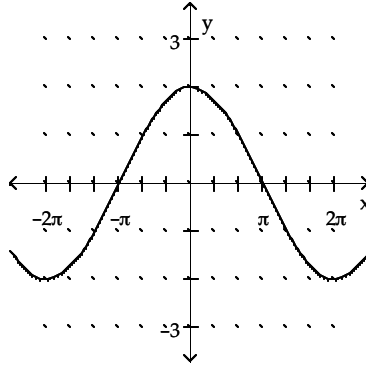
Match the function with its graph.

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

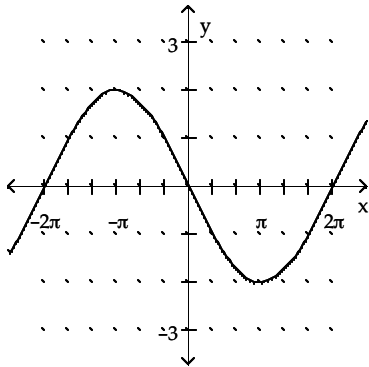
A)



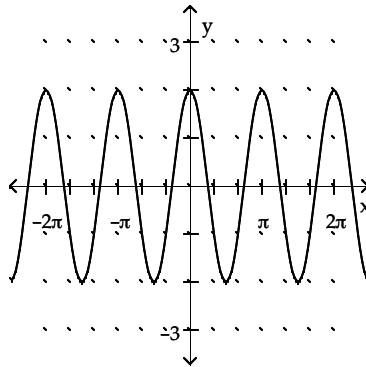
B)



C)

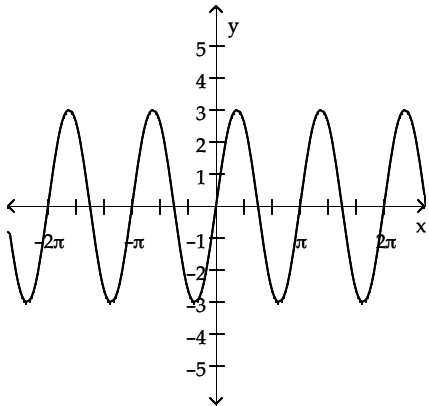


D)



Find an equation for the graph.

7)



Solve.

- 8) For what numbers x , $0 \leq x \leq 2\pi$, does $\sin x = 0$?

Answer Key

Testname: SECTION5-4.TST

1) 1B, 2D, 3C, 4A

2) $y = 4 \sin\left(\frac{2}{3}x\right)$

3) $\frac{1}{35}$ second, amplitude = 240

4) $0, 2\pi$

5) $\frac{3\pi}{2}$

6) 1A, 2C, 3D, 4B

7) $y = 3 \sin(2x)$

8) $0, \pi, 2\pi$