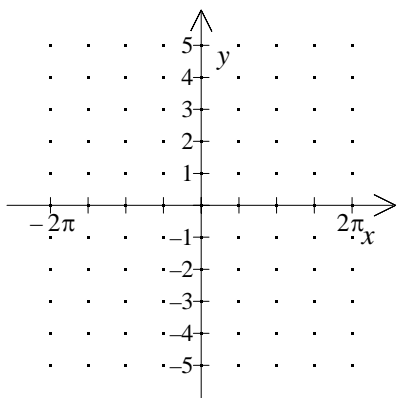


NAME: \_\_\_\_\_

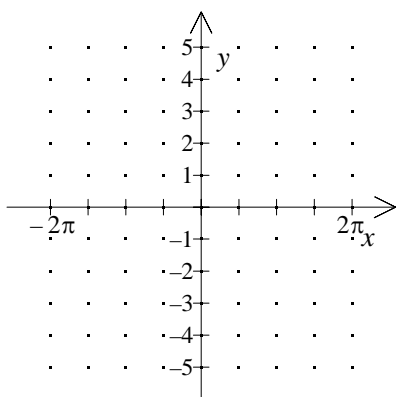
*P.I. A2.A.70: Sketch and recognize one cycle of a function of the form  $y = A \sin Bx$*

1. Graph  $y = \sin x$ .



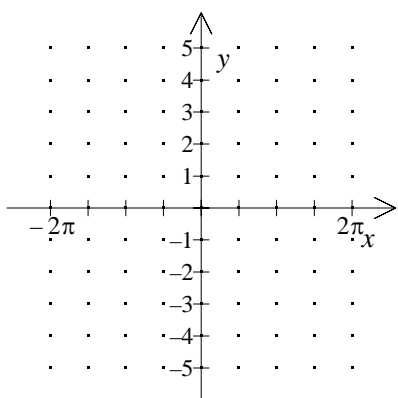
[1] \_\_\_\_\_

2. Graph  $y = 4 \sin x$ .



[2] \_\_\_\_\_

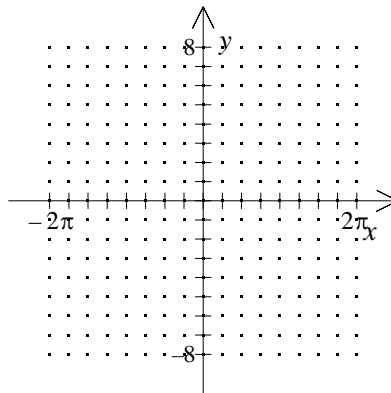
3. Graph  $y = 2 \sin x$ .



[3] \_\_\_\_\_

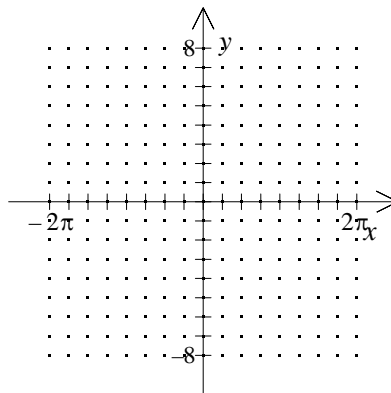
Graph:

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



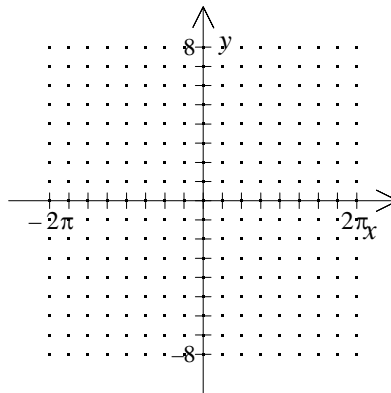
[4] \_\_\_\_\_

5.  $y = -\sin(4x)$



[5] \_\_\_\_\_

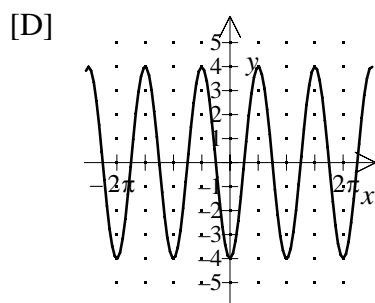
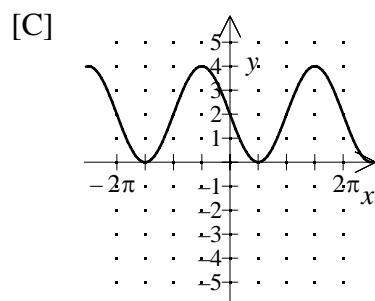
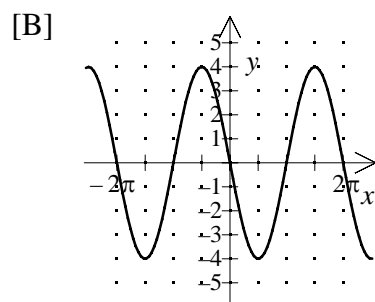
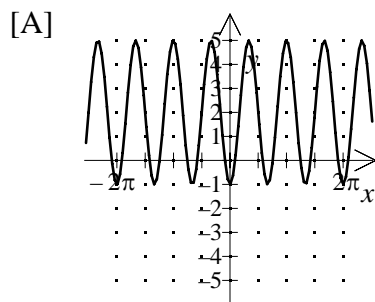
6.  $y = -6 \sin(2x)$



[6] \_\_\_\_\_

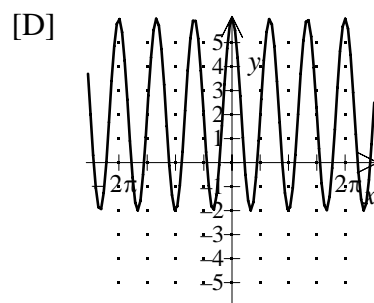
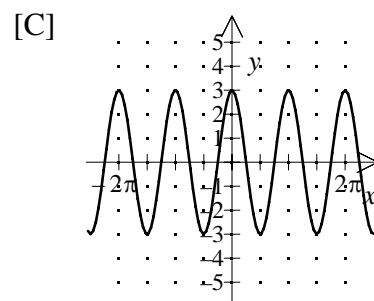
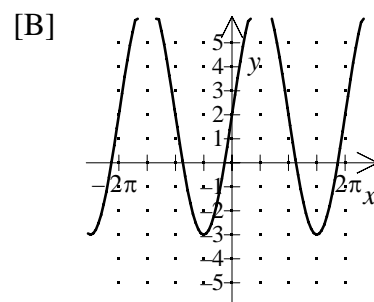
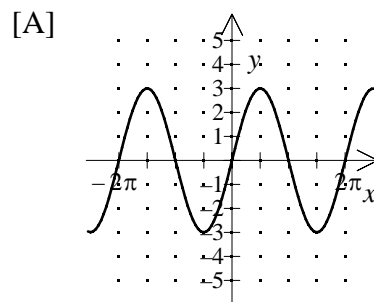
NAME: \_\_\_\_\_

7. Graph  $y = -4 \sin x$ .



[7] \_\_\_\_\_

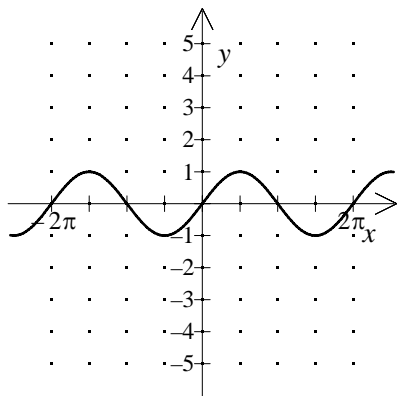
8. Graph  $y = 3 \sin x$ .



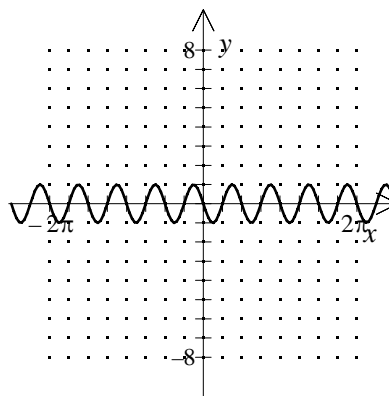
[8] \_\_\_\_\_

9. An electromagnetic wave is modeled by the function  $y = 5 \sin 2x$ . Sketch a graph of this function.

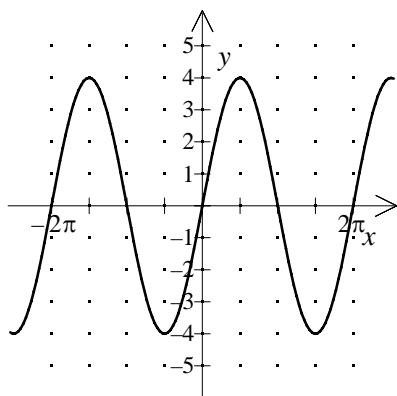
[9] \_\_\_\_\_



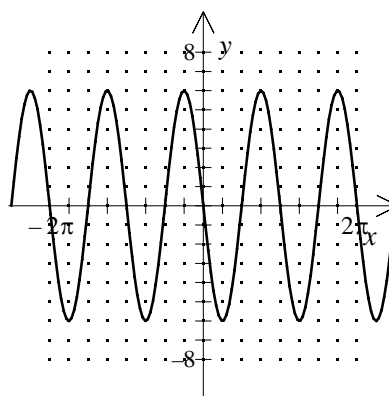
[1]



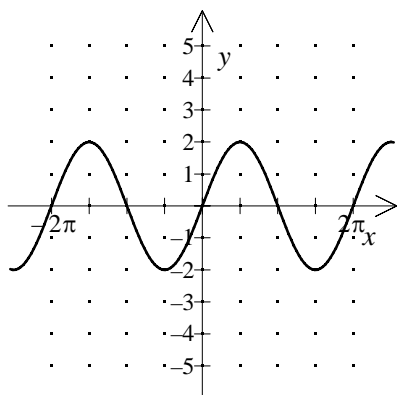
[5]



[2]



[6]



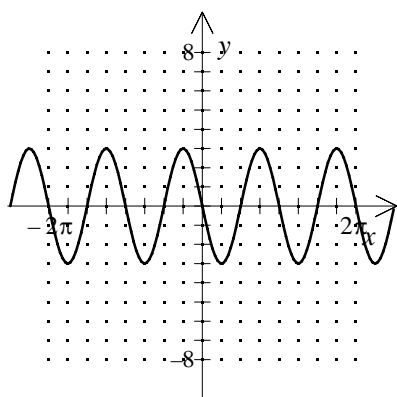
[3]

[7] B

[8] A

Check students' graphs. Amplitude should be 5, period should be  $\pi$ , so a maximum is at  $\left(\frac{\pi}{4}, 5\right)$ ,  $x$ -intercepts are  $(0, 0)$ ,  $\left(\frac{\pi}{2}, 0\right)$ , and  $(\pi, 0)$  and a minimum is at  $\left(\frac{3\pi}{4}, -5\right)$ .

[9]



[4]