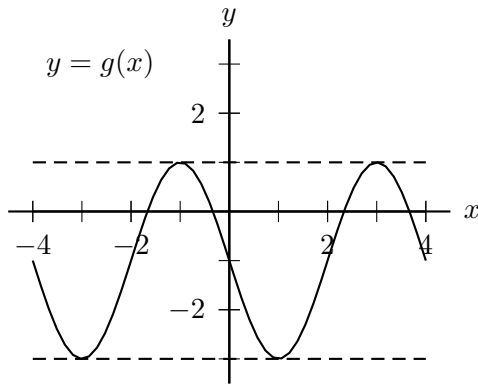


1. [14 points] *Note: No work or explanation is required on this page.*  
 The graph of a sinusoidal function  $g$  is shown below.



- a. [6 points] Find the period, amplitude, and midline of  $y = g(x)$ .

Period: \_\_\_\_\_

Amplitude: \_\_\_\_\_

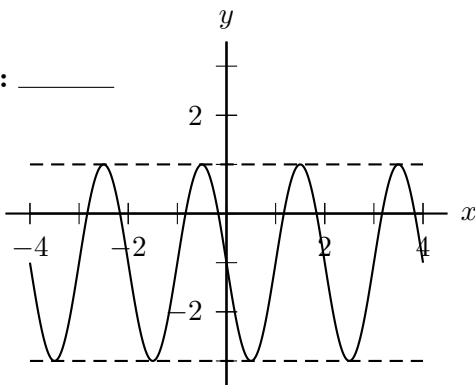
Midline: \_\_\_\_\_

- b. [8 points] Below are the graphs of several transformations of  $g(x)$ . For each of these graphs, write the letter of the ONE function from the “Answer Choices” whose graph is shown. (**Clearly** write the capital letter of your choice on the answer blank provided.)

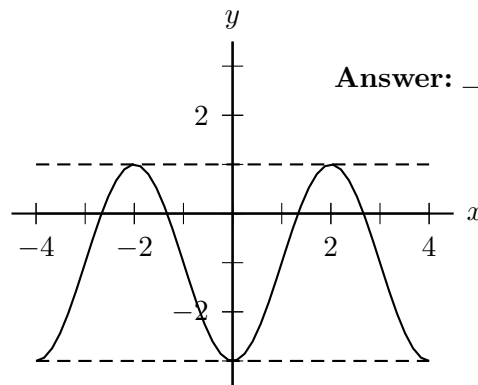
Answer Choices

- |                      |                      |               |                                    |
|----------------------|----------------------|---------------|------------------------------------|
| A. $g(\pi x)$        | E. $g(2x)$           | I. $g(x - 1)$ | M. $g(x - 2)$                      |
| B. $\pi g(x)$        | F. $g(\frac{1}{2}x)$ | J. $g(x) + 1$ | N. $g(x) + 2$                      |
| C. $\frac{1}{2}g(x)$ | G. $g(x) - 1$        | K. $g(x) - 2$ | O. $2g(x) - \frac{1}{2}$           |
| D. $2g(x)$           | H. $g(x + 1)$        | L. $g(x + 2)$ | P. $\frac{1}{2}g(x) + \frac{1}{2}$ |

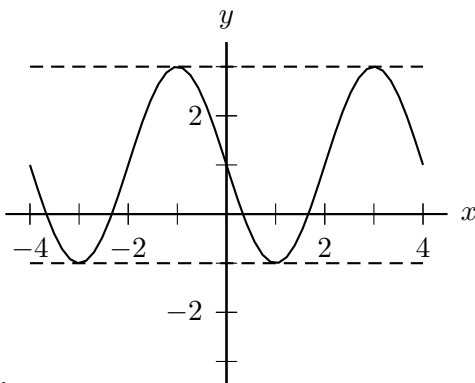
Answer: \_\_\_\_\_



Answer: \_\_\_\_\_



Answer: \_\_\_\_\_



Answer: \_\_\_\_\_

