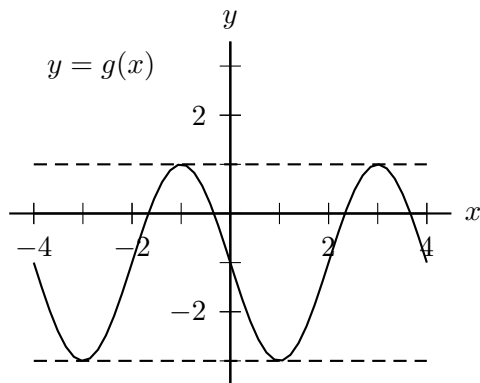


1. [14 points] *Note: No work or explanation is required on this page.*

The graph of a sinusoidal function g is shown below.



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

Period: 4

Amplitude: 2

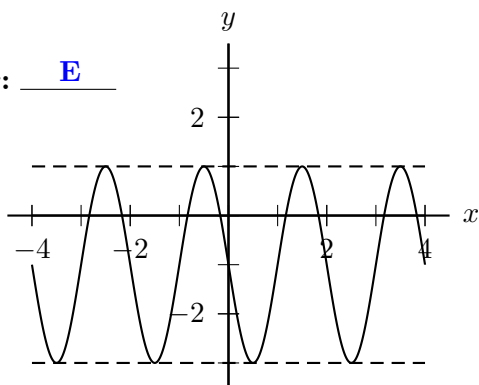
Midline: $y = -1$

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.)

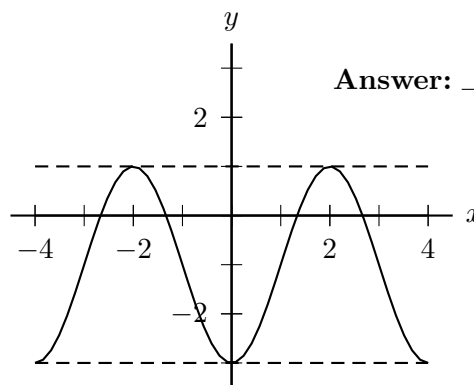
Answer Choices

- | | | | |
|----------------------|----------------------|---------------|------------------------------------|
| 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. $\frac{1}{2}g(x) + \frac{1}{2}$ |

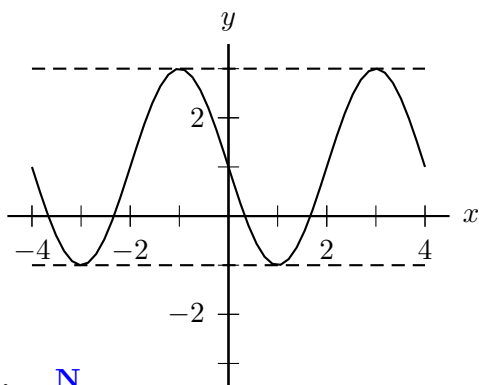
Answer: E



Answer: H



Answer: N



Answer: C

