

This has the right amplitude and period, but this is the graph of a cosine function. In particular, the graph of  $y = \frac{3}{2} \sin\left(\frac{1}{2}x\right)$  must pass through the point  $(0, 0)$ , while this graph does not. The correct answer is the graph with one hill over the interval  $[0, 2\pi]$ .