

This is the graph of a sine function: it has the repeating hill and valley pattern and passes through the origin. The amplitude of this graph and  $y = 2\sin 3x$  is 2.

This graph has 3 cycles in the interval  $[0, 2\pi]$ , or a period of  $\frac{2\pi}{3}$ . The same is true for  $y = 2\sin 3x$ , so the graph and the function match.