

Because the high point is  $(0, 4)$ , the height of the hill is 4. This is the amplitude of the function that was graphed. The amplitude of  $y = 4 \cdot \cos 5x$  is also 4.

The length of one cycle is  $\frac{2\pi}{5}$ . This is equal to the period of the function that was graphed. Now  $y = 4 \cdot \cos 5x$  also has a period equal to  $\frac{2\pi}{5}$ . So this could be the function that was graphed.