

You found the correct amplitude and orientation, but the period is incorrect. Perhaps you recognized that the period of the graph is 3 times the period of $y = \sin x$, and thought that would make $b = 3$. But to find the value of

b , you must set the period equal to $\frac{2\pi}{|b|}$. The correct answer is $y = -4\sin\left(\frac{1}{3}x\right)$.