

Correct. The amplitude is $|-3| = 3$. This tells you that the y -coordinate of the high point is 3.

The period of this function is $\frac{2\pi}{\frac{\pi}{2}} = \frac{2\pi}{1} \cdot \frac{2}{\pi} = \frac{4\pi}{\pi} = 4$.

On the interval $[-2, 0]$ the graph will have half of a cycle. If you graphed $y = 3\sin\left(\frac{\pi}{2}x\right)$, there would be a valley on this interval. Because of the negative sign in front of $y = -3\sin\left(\frac{\pi}{2}x\right)$, the graph has a hill on $[-2, 0]$ (and valleys to the left and right). The high point is in the middle of the hill, so the x -coordinate is -1 .