

31 Half of the difference between the maximum and the minimum values is $0.5(2 - (-2)) = 2$. Since the sine graph is reflected in the x -axis, $a = -2$. The graph repeats every 4π units thus $\frac{2\pi}{b} = 4\pi \Rightarrow b = \frac{1}{2}$. So $a = -2$ and $b = \frac{1}{2}$.