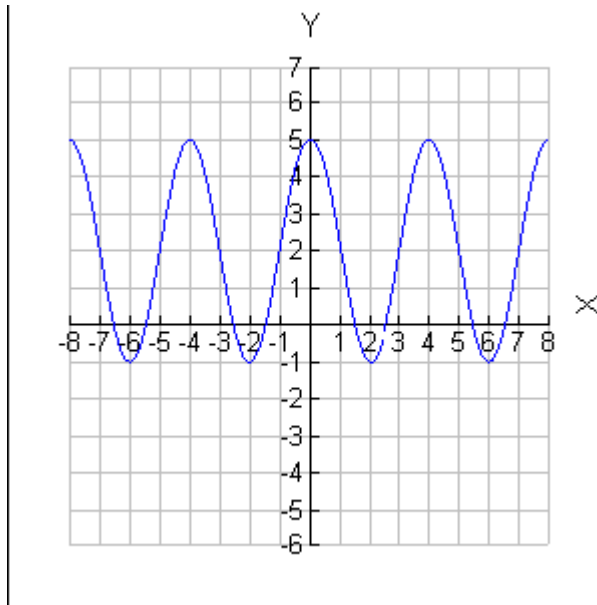
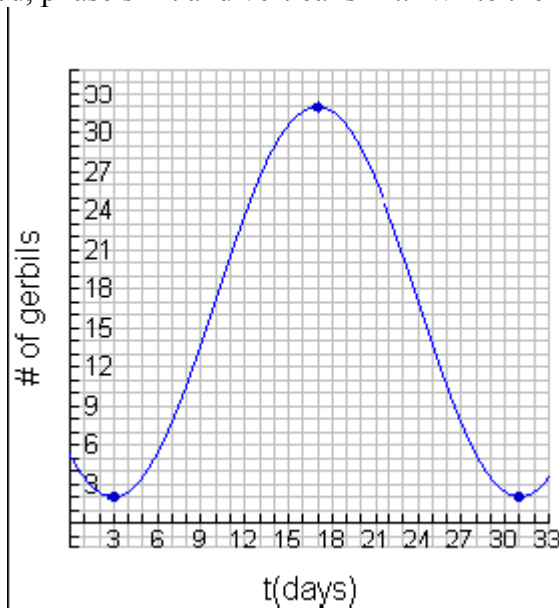


PreAP Precalculus: Writing sinusoidal equations from graphs

Example 1: Write both a sine and a cosine equation for the following graph.

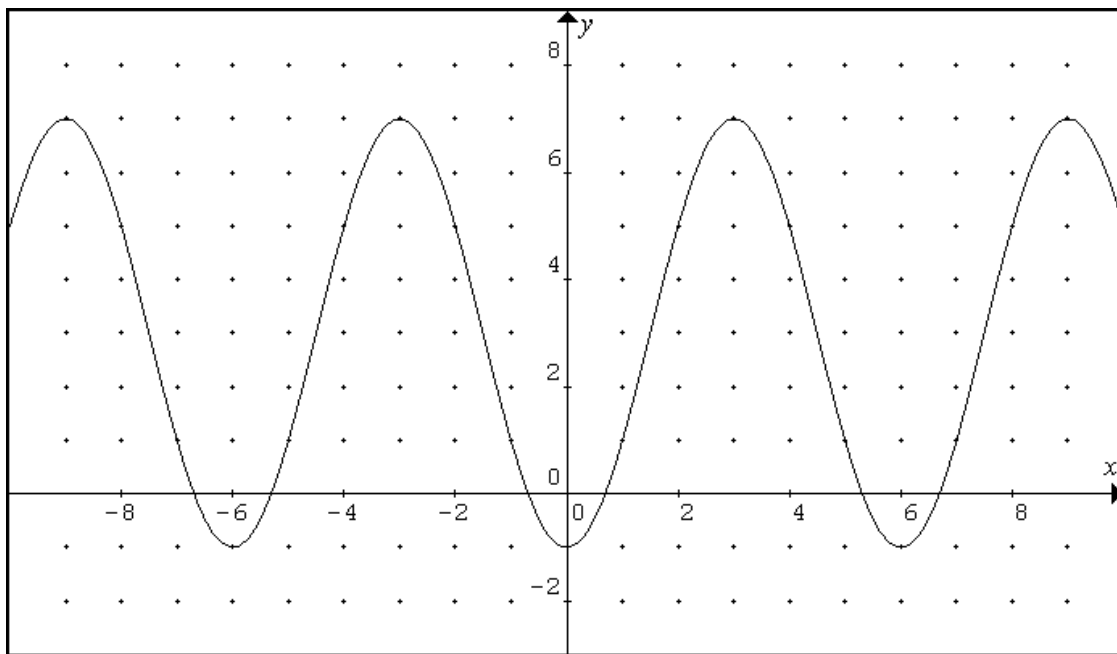


Example 2: A pet store clerk noticed that the population in the gerbil habitat varied sinusoidally with respect to time, in days. He carefully collected data and graphed his resulting equation. From the graph, determine the amplitude, period, phase shift and vertical shift. Write the equation of the graph.

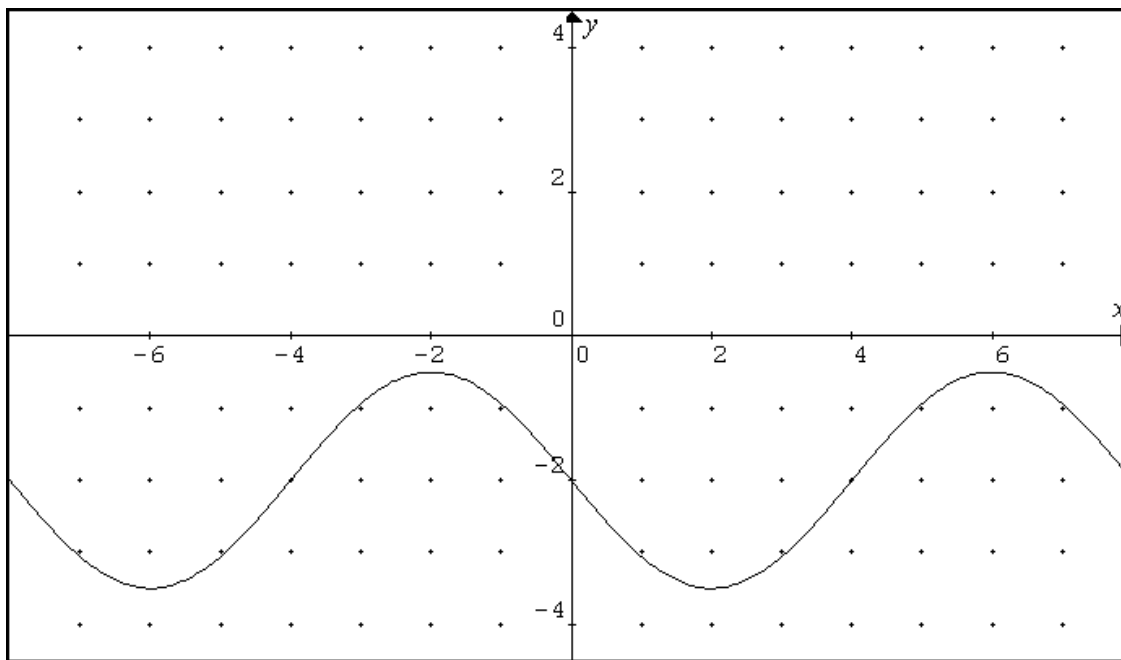


Example 3: For each of the following, write a cosine and a sine equation for the following graph. Make at least one of your equations have a negative amplitude.

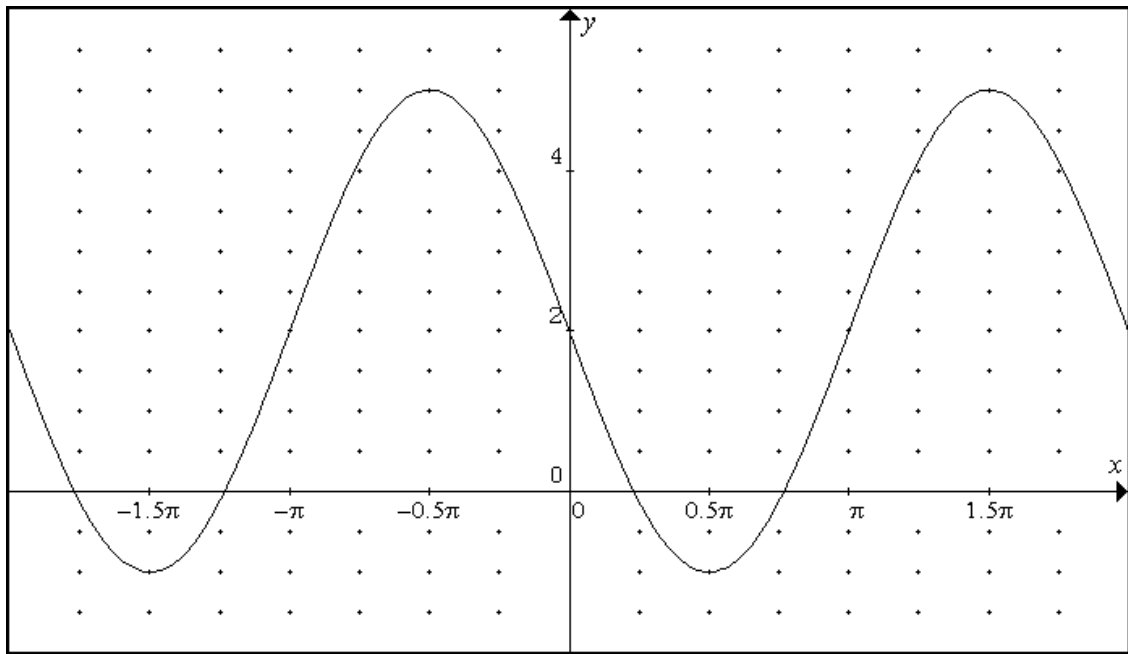
a.



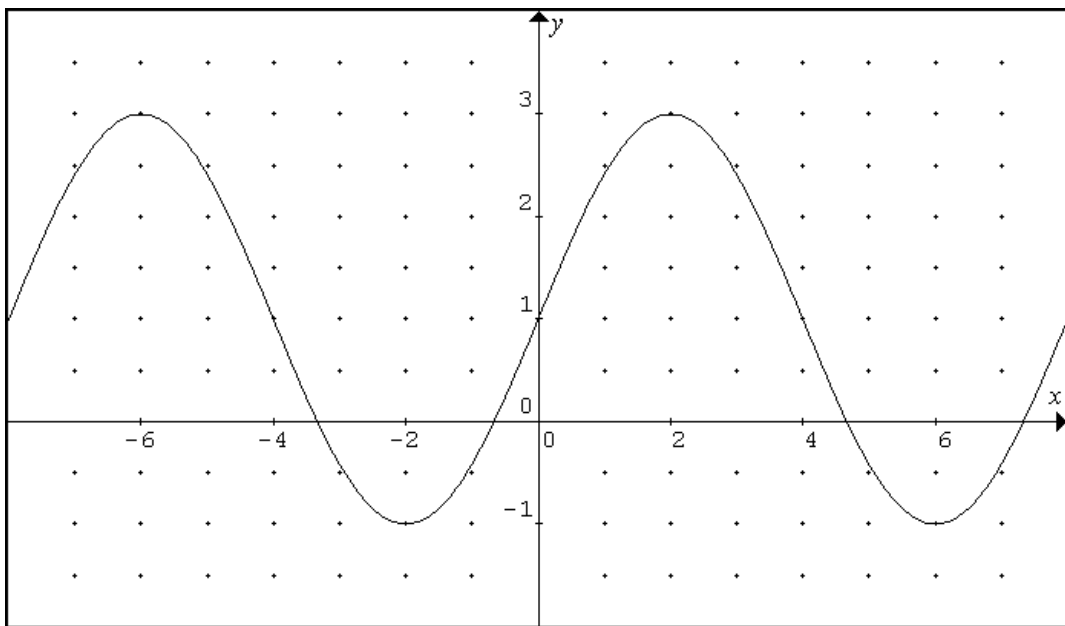
b.



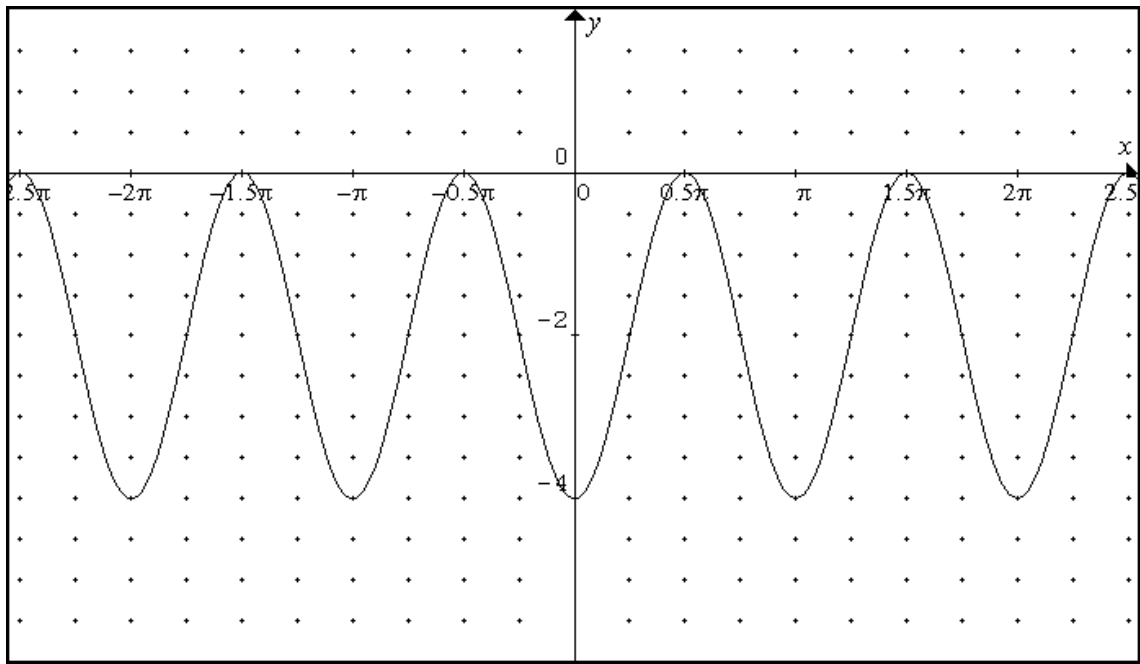
c.



d.



e.



f.

