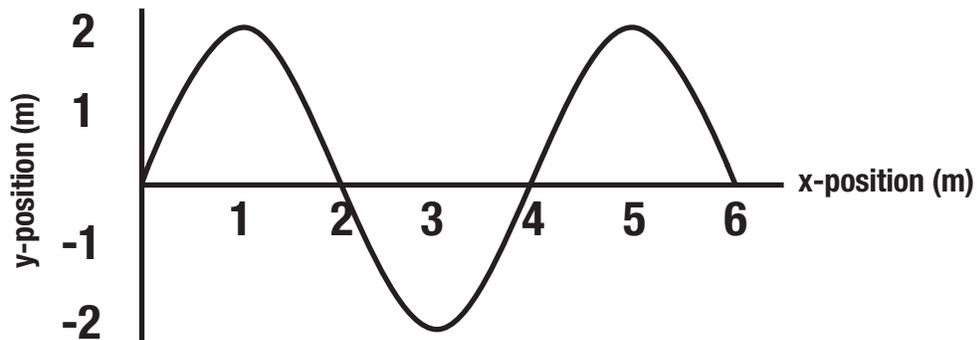


**Work each of the following problems. SHOW ALL WORK.**

1. A child sits on a dock and notices that 8 wavelengths pass the end of the dock in 4 seconds. What is the frequency of the waves passing the dock?
2. What is the period of the waves in question 1?
3. Using the diagram below, determine the wavelength and amplitude of the wave:



4. A pendulum oscillates 12 times in 4 seconds.
  - a. What is the frequency of the pendulum's oscillations?
  - b. What is the period of the pendulum's oscillations?

**Work each of the following problems. SHOW ALL WORK.**

c. What is the length of the pendulum?

5. A pendulum is 0.25 meters long. What is the frequency of its oscillations?

6. A water wave has a frequency of 2 Hz, and there are 3 meters between each crest on the wave. How fast is the wave moving?

