

## 6.1 Review Questions

1. What is the source of all wave motion?
2. What kind of wave has no amplitude and no frequency?
3. How many vibrations per second are there from a radio signal from 107.3 MHz?
4. What is the period of a wave that has a frequency of 25 Hz?
5. What is the frequency of a wave that has the period of 2.0 s?
6. When a salmon fishing boat captain describes waves as being 8 m high, what is the approximate amplitude of these waves? Explain your answer.
7. What is the frequency of the second hand on a clock?
8. What is the frequency of the hour hand on a clock?

9. If the frequency of a sound is tripled, what will happen to the period of the sound waves?

10. A student measures the speed of water waves in her tank to be 25 cm/s. If the wavelength is 2.5 cm, what is the frequency of the waves?

11. Some microwaves have a frequency of  $3.0 \times 10^{10}$  Hz. How long is a microwave of this frequency? (Microwave radiation travels at the speed of light.)

12. While fishing, a girl notices the wave crests passing her bob once every 6 s. She thinks the distance between crests is about 12 m. What is the speed of the water waves?