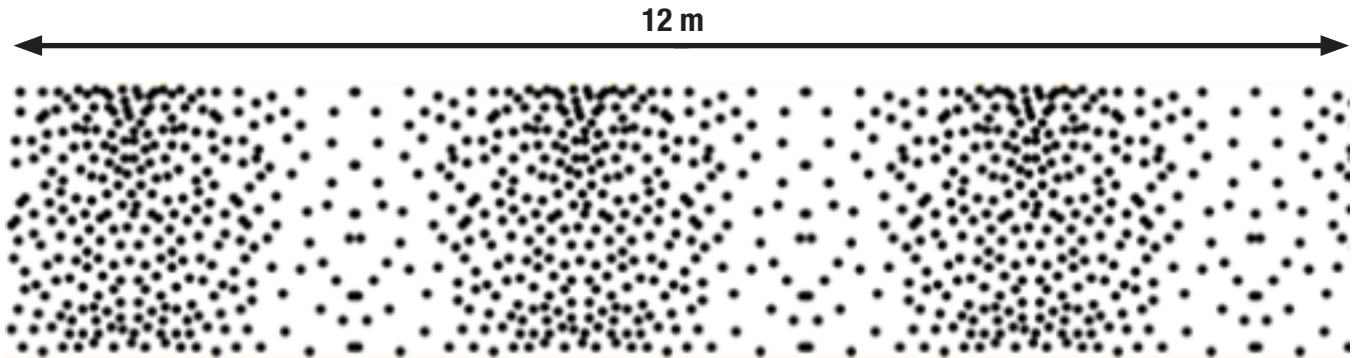


Work each of the following problems. SHOW ALL WORK.

1. Determine the wavelength of the longitudinal wave below:



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2. A sound wave is determined to have a frequency of 1,000 Hz and a wavelength of 35 cm. What is the speed of this wave?
3. If the sound wave in the previous question is measured in air, what is the temperature of the air?
4. What is the speed of sound in air with a temperature of 25 °C?

