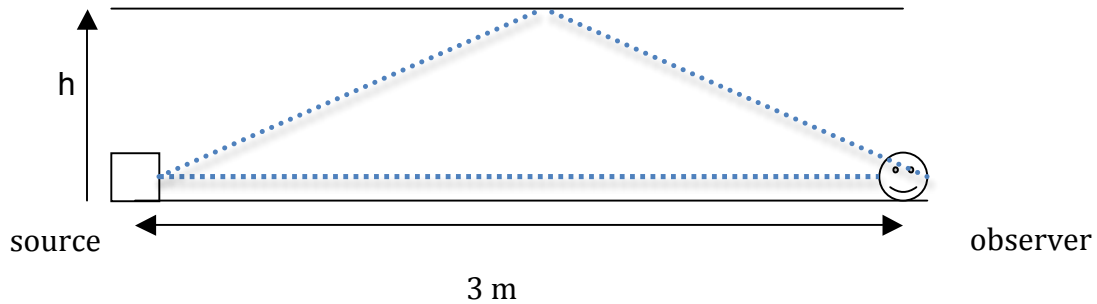


Sound and Interference Reflective Ceilings

A speaker was placed on the ground under a reflective surface. The observer will hear a maximum or minimum depending on where the reflective surface is located.



1. The observer hears a max if the height of the ceiling is 12 cm. Find the wavelength and frequency of the source.
2. The source changes to a frequency of 450 cycles per second.
 - a. Find the first placement of h so that a minimum is heard.
 - b. Find the placement of h so that first max is heard.
 - c. Find the placement of h so that second minimum is heard.