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1. To answer the questions in this homework you need to review Lectures 19 and 20 (all about sound waves). Always show your work where appropriate!
  
2. Refer to Slide #2 of Lecture 19. What kind of wave is sound?
  
3. Refer to Slide #5 of Lecture 19. How many vibrations per second does the *lowest pitch typically audible by humans* have?
  
4. Refer to Slides ##2-3 of Lecture 20:
  - a. What is the difference in the intensity of sound (in db) between a *normal conversation and a loud rock concert*?
  
  - b. What is the corresponding sound energy difference?
  
5. How long will it take for a sound wave to travel 1 mile (about 1.6 km) *in the air*?
  
6. Suppose you could yell “Hello!” underwater 😊. At least how far away an underwater mountain must be located to produce a clear echo?