

- 1.) The city of Inglewood is building a branch library next to Los Angeles International Airport. Aircraft passing 3000 feet above the proposed site which you are evaluating produce a sound Intensity Level of 70 decibels (dB) measured at the ground below. The planes always follow an east-west path when approaching the runway.
  - A.) What is the sound power in watts radiated by the aircraft?
  
  
  
  
  
  
  
  
  
  
  - B.) What would be the IL (in dB) at an alternative site 4000 feet to the north?
  
- 2.) A firetruck siren sounding outdoors gives a maximum sound intensity level (IL) of 110 dB at 10 feet. What intensity level would be observed at a distance of 80 feet with four firetruck sirens of the same power going at the same time?
  
  
  
  
  
  
  
  
  
  
- 3.) The inverse square law usually gives a good approximation of the decrease in sound intensity with distance from the source in outdoor situations. List at least two reasons that this approximation might not give precise results in evaluating a given outdoor situation.