Name _____ Id _____

Due Date _____ Lab Instructor _____ Section _____

Worksheet # 2

1. What types of waves exhibit the Doppler effect?

   a) Light waves
   b) Water waves
   c) Sound waves
   d) All of the above
   e) None of the above

2. What is the likely reason that the Doppler effect has first been proposed for sound waves rather than light waves? (Okay, granted, this also answers some of question 1.)

3. In regard to electromagnetic waves, what can be measured by the Doppler effect?

   a) Radial velocities
   b) Transverse velocities
   c) Total (combined) velocities

4. In regard to electromagnetic waves, which part(s) of the electromagnetic spectrum are subjected to the Doppler effect? Name three examples.

5. Residing on the assumption that the Doppler effect is found both for sound waves and electromagnetic waves (in vacuum) – what (if any) is the role of the medium? In which cases (if any) is the underlying equation affected depending on whether the observer moves or the source moves?