1) __C__ White light coming from an incandescent or fluorescent light bulb consists of:
A) one sinusoidal wave.
B) only a few sinusoidal waves, one for each color.
C) many, many sinusoidal waves that vary in almost everything, including color and phase.
D) many identical sinusoidal waves, except that they have different frequencies (colors).
E) many waves that are not sinusoidal.

2) __D__ Light is:
A) An electric wave.
B) A magnetic wave.
C) A wave carried by a medium known as the luminiferous ether.
D) Both an electric and a magnetic wave.
E) A wave that cannot move through a perfect vacuum.

3) __A__ The only difference between a radio wave and visible light is:
A) their wavelengths   B) their phases
C) their polarizations   D) their speeds
E) their amplitudes

4) __E__ If you send unpolarized white light through an ordinary polarizing filter, the result will be:
A) uniformly polarized light with a specific color.
B) polarized white light with the same intensity as the incident light.
C) unpolarized white light with one-half the intensity as the incident light.
D) light with the different colors polarized at different angles.
E) polarized white light with one-half the intensity of the incident light.

5) __A__ The intensity of polarized light sent through *two* successive polarizing sheets varies as $\cos^2\theta$.
This is because:
A) The intensity of a wave varies as the amplitude squared, and the polarized amplitude goes as $\cos\theta$.
B) The direction of the light going through the first sheet is at an angle θ.
C) The second sheets acts to rotate the polarization of the first sheet.
D) The electric field of a light wave varies depending on its angle relative to the magnetic field.
E) The electric field of the light wave is at 90° relative to the second sheet.