Chapter 5 Configuration worksheet

On all math problems show the given, formula used and the work to receive full credit
h= 6.6262x 10^{-34} J s c= 3.00 x 10^{8} m/s $c = \lambda v$ E=hv

1. Write the electron configuration and draw the orbital diagrams for the following:
    a. Antimony
    b. Cobalt
    c. Barium
    d. Copper
    e. Xenon
    f. Silver
    g. Holmium (#67)

2. Write the electron configuration and draw the orbital diagrams for the following:
    a. N^{-3}
    b. Se^{-2}
    c. I^{-1}
    d. Ca^{+2}
    e. O^{-2}
    f. Fe^{+3}

3. State the 3 rules for electron configuration.

4. What is the wavelength of light with the energy of 4.2 x 10^{-18} J? (2 steps needed to solve)

5. Explain how Iron can have more than one possible electron configuration.