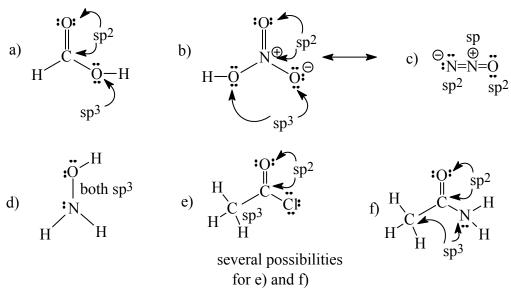
CHM 241 Some Chapter 1 and 2 problems

1. Propose reasonable Lewis-dot structures for the following. There may be more than one correct answer.



2. Identify the hybridization of each atom other than H and Cl in the compounds above. See above.

3.

4. Propose a structure of a hydrocarbon with 4 carbons that has $2 \text{ sp2} - \text{sp } \sigma$ bonds.

$$H \sim C = C = C$$

5. Draw an orbital depiction of acrylonitrile. Label all bonds (π or σ) and orbitals (e.g. sp³).

H
$$C = C$$
 H acrylonitrile

6. Determine the molecular formula of the following compounds:

