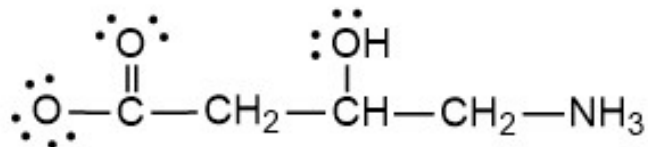




- 1 Add in any missing formal charges on the following Lewis structure (all electrons are shown). What is the NET (overall) charge?



Identify the type of bonding present (covalent, ionic, or both).



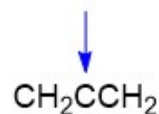
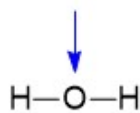
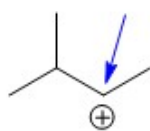
Draw a complete Lewis structure for each:



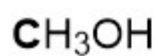
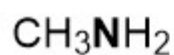
Number of pi bonds \_\_\_\_\_

Number of sigma bonds \_\_\_\_\_

7 Identify the hybridization for each of the following indicated atoms.



8 Describe the hybridization and geometry about the bolded atom for each.



- |                  |                    |
|------------------|--------------------|
| 1) $\text{sp}$   | a) linear          |
| 2) $\text{sp}^2$ | b) bent            |
| 3) $\text{sp}^3$ | c) tetrahedral     |
|                  | d) trigonal planar |
|                  | e) pyramidal       |

9 Provide a 3D sketch of the given compound.

