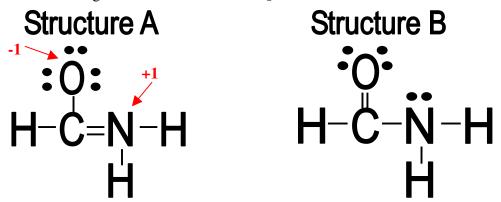


1. Examine the structure for the cyanide ion, CN<sup>1-</sup> below. Label the formal charge of each of the atoms.

2. Consider the following two structures for CHNH<sub>2</sub>O?



A) Are both of the structures legitimate structures? I.e. Do all atoms have eight electrons? Are the right number of electrons used?

Both structures are legitimate.

- B) Label each of the atoms in both structures with their appropriate formal charges. (see above: all nonzero charges are labeled)
- C) Which structure—A or B—is the best structure for CHNH<sub>2</sub>O? Explain.

B is best because it has the fewest nonzero formal charges.

3. Draw a structure for  $ClO_3^{-1}$ . Label the formal charge of each atom.

