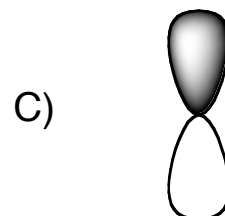
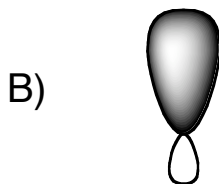
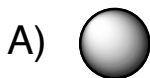


1) (3 pts) Identify the following types of atomic orbitals:



2) (3 pts) What bond angles do you expect between groups bound to the following types of carbon?

A)  $sp$

B)  $sp^2$

C)  $sp^3$

3) (2 pts) Draw the structural formula for 1-ethyl-3-(1,2-dimethylbutyl)cyclohexane.

4) (2 pts) Give the IUPAC name for the following molecule:

