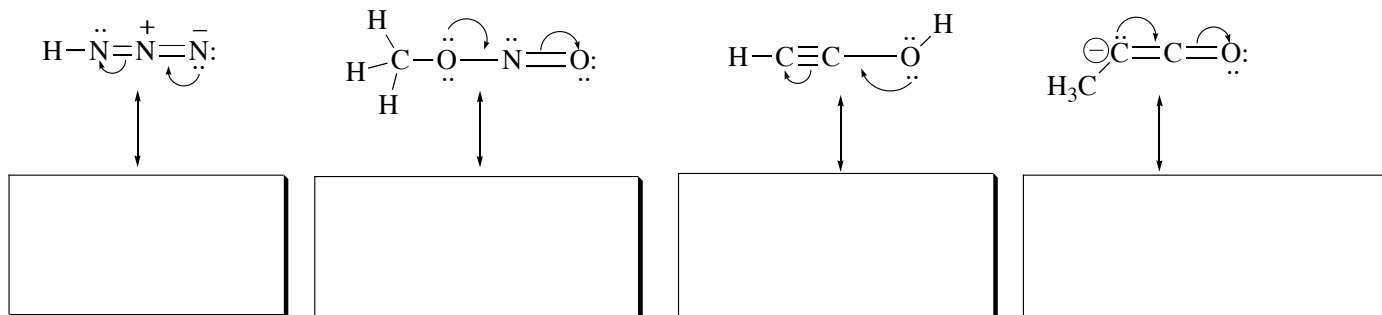


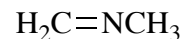
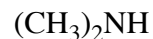
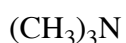
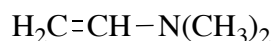
Chem 2521; Fall 2005; Quiz 2

Printed Name (Last, First): \_\_\_\_\_

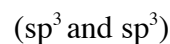
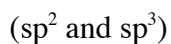
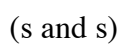
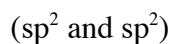
1. (8) Draw the **resonance contributing structures** indicated by the **curved arrows**. Assign formal charges and show unshared electron pairs as appropriate (2 pts each contributor).



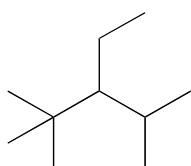
2. (3) Which of the following structures contains an  $sp^2$ -hybridized nitrogen atom?



3. (3) Which atomic orbitals of carbon atoms overlap to form C–C  $\sigma$ -bonds in the molecule of  $\text{CH}_3\text{COCH}_3$ ?

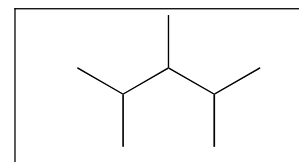


4. (6) Give either the **IUPAC name** or the **correct structure** for each of the following compounds:



2,2,3,3-tetramethylbutane (line-angle formula):

5. (3) Circle the correct molecular formula for the following line-angle structure:



6. (2) Circle the structure of the compound that has the **tertiary carbon** atom:

