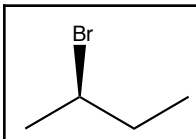
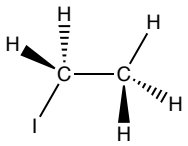
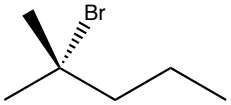
CHEM 0203 Name _____
2/6/13

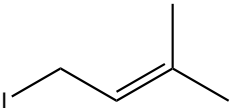
Quiz 1

1. (10 pts. each) Determine whether the following molecules could undergo nucleophilic substitution via S_N1, S_N2, both, or neither.



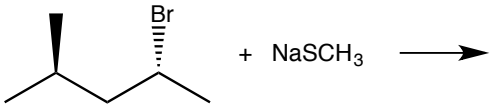




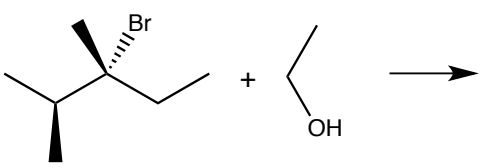


2. (20 pts. each) Predict the products for the following substitution reactions. Write complete balanced equations, and indicate the stereochemistry of the product(s) using wedge ( ) and dash ( ) bonds where appropriate.

S_N2



S_N1



3. (20 pts.) When a nucleophilic substitution occurs in the reaction below, the nucleophile adds to two places. Draw a mechanism that accounts for these products. (Stereochemistry has been ignored in the reaction drawn below.