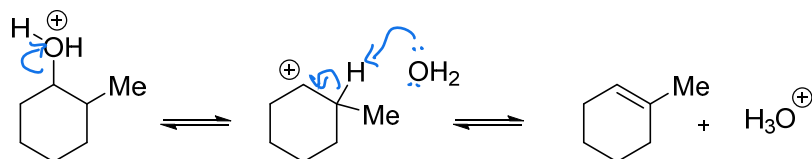
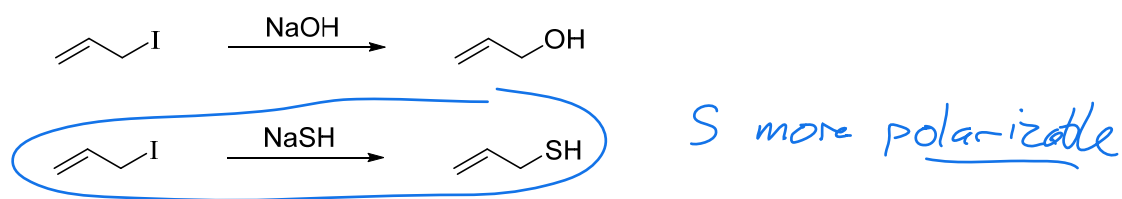


Name: _____

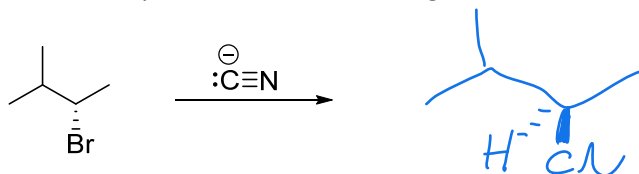
1. Draw any missing lone pairs, and then draw the curved arrows that accomplish each of the following transformations. (2 points)



2. a. Circle the reaction which will proceed at a faster rate.
b. Briefly explain your choice. (2 points)



3. Predict the product for the following $\text{S}_{\text{N}}2$ reaction. Be sure to clearly indicate stereochemistry. (2 points)



4. a. Predict the **major E2 elimination** product for both of the following reactions.
b. Provide an arrow pushing mechanism for the **first reaction (i.)** to account for your predicted product. (4 points)

