

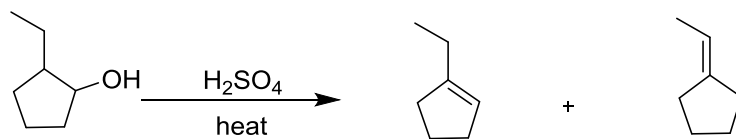
Name:

CHE 231

Fall 2014

Quiz #4

1. Consider the reaction shown below:

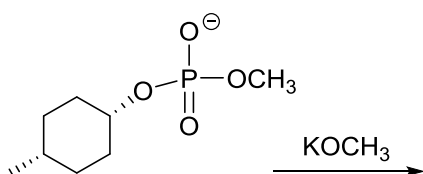


- a) Provide a detailed mechanism for the formation of each product, clearly showing each step. (6 points)

2. Which of the following alkyl halide would be least reactive in an S_N2 reaction? (3 points)

- A) 1-Iodopropane
- B) Iodomethane
- C) 2-Iodopropane
- D) 2-Iodo-2-methylpropane
- E) Isopropyl iodide

3. Predict the product(s) of the reaction shown below, show stereochemistry where necessary. (3 points)



4. Which reaction condition will best favor an S_N1 reaction on (S)-2-bromo-3-methylbutane. (3 points)

- A) Weak nucleophile in an aprotic solvent
- B) Strong nucleophile in a protic solvent
- C) Weak nucleophile in a protic solvent
- D) Strong nucleophile in an aprotic solvent