## CHM 227 Exam 4 Fall 2016

## **Short Answer**

1. Why does 3-bromo-1-butene react much faster than 2-bromobutane in SN1 and E1 reactions? Use structures to support your answer.

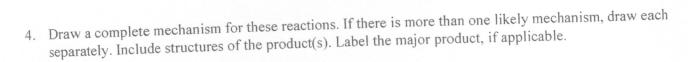
2. Draw mechanisms to account for the products of these reactions.

1-bromomethylcyclohexene

3.	Devise a synthesis of these	compounds	using	acetylene,	any	alkyl	halide,	and	any
	needed reagents.								

2,2-dibromobutane

2-iodo-4-methylpentane



1-bromo-1-methylcyclohexane + NaOH

1-bromo-1-methylcyclohexane + EtOH

1-chlorohexane + NaI in acetone

5.	Show 2 different ways to make this compound by $S_{N}2$ reaction.	Which one is better? Explain why
	$(CH_3)_2CH$ -O- $CH_2CH_3$	