**exercise #19: Reactions & Syntheses of Alkenes-The Kitchen Sink**

 **Organic Chem I Alfred State College**

**BOXING WARM-UP**

 B2H6

1a. CH2=C(CH3)2



b.

c.

 CH2=CH-CHBr-CH3

d) H2C=C(CH3)2 CH3-C(CH3)2-OH





d.

 O3/Zn,H+

 Cl2/

CCl4 solvent



 (both products)

 Syn diol

syntheses and reactions involving alkenes (continued)

**SYNTHESES**  ***part 1: One Size Fits All***

Starting from the given substrate find a route to the target product:



Starting from the given substrate find two different routes to the target product:



**SYNTHESES Part 2: Bigger Is Better**

Starting from compounds of 4 carbons or less, provide a route to...





 3-bromo-2-methyl-2-hexene