**exercise #21: Yet More Alkene-based roadmaps and reactioneering**

 **Organic Chem I Alfred State College**



George the alkene

**21.1 Suggest 3 different routes to ‘George’ using any starting materials you want:**

**21.2 Starting from alcohols of 5 or fewer carbons and any carbonyl (>C=O) compound, suggest a route to `George’.**

**21.3. fill in all the reagents that turn `George’ into the final compound shown below**



**21.4. Suggest routes from:**

1. 2-propanol to 1-bromo-2-propanol
2. 2-bromopropane to 1-bromopropane

c) 6-bromo-1-hexanol to cyclohexane

d) find a route from to…..





**21.5…Throwing down the synthetic gauntlet… 3 mole bucks each**



Starting from carbon-oxygen compounds with 3 or fewer

 carbons describe a route to the compound here:

Starting from carbon-oxygen compounds with 3 or fewer carbons, including:





find a route to: