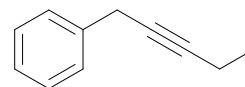
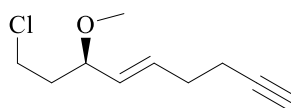
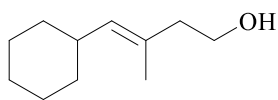
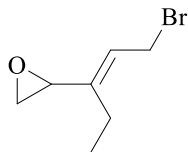


## Sample Exam Modules 5 and 6 #2

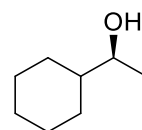
1. Name the following compounds. Consider stereochemistry in each case.



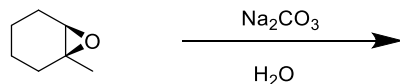
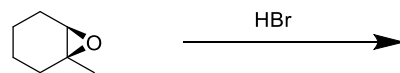
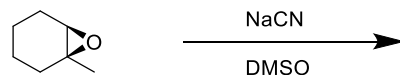
2. Give an example of....

- a toluenesulfonate that would *not* react with cyanide in an  $S_N2$  reaction.
- a compound with the formula  $C_6H_{10}$  that would react with only one equivalent of  $Br_2$ .
- a compound with the formula  $C_6H_{10}$  that would react with sodium hydride.
- a reaction that you know that is a reduction but does not involve an alkene or an alkyne.

3. Suggest five possible products that could be fished out of the mess created by treating the alcohol shown on the right with concentrated aqueous sulfuric acid, providing a mechanism that leads to them.



4. Give the major product of each of the following reactions:



5. Indicate the expected MAJOR product of reactions a-c and the reagents necessary to carry out the reactions for d-f, which may involve more than one step.

