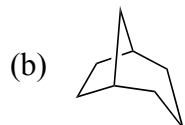
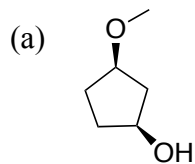




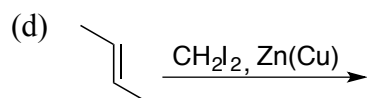
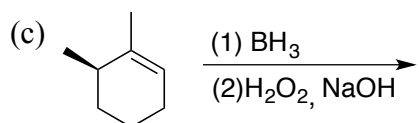
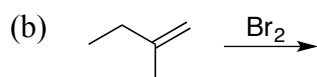
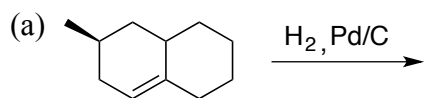
1. A) Give IUPAC names for the following compounds (Be sure to indicate stereochemistry when appropriate) (6 pts).

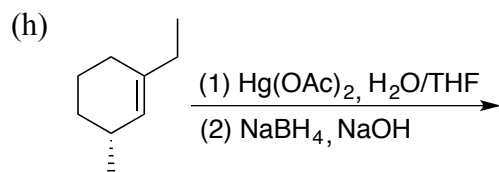
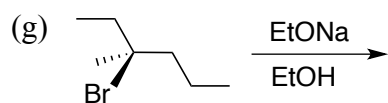
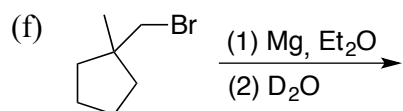
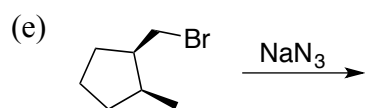


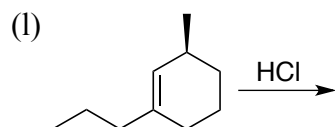
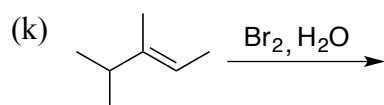
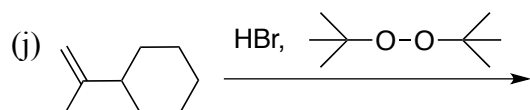
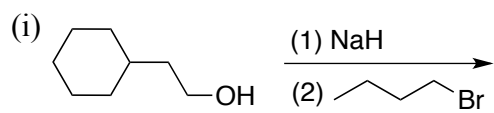
- B) Draw all stereoisomers of the following compound (8 pts). Provide the most stable chair conformation for each stereoisomer (8 pts).

1-*tert*-butyl-3-methylcyclohexane

2. Provide the major products of the following reactions (Be sure to indicate stereochemistry when appropriate) (48 pts).







3. Using the curved arrow notation, suggest a mechanism for the formation of each product (30 pts).

