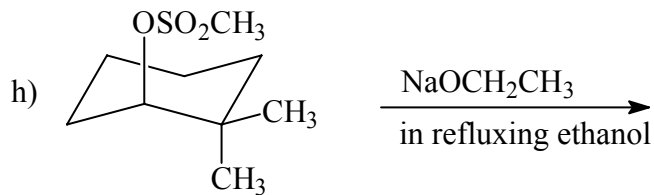
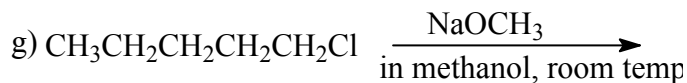
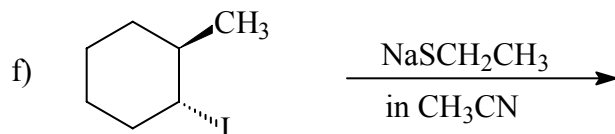
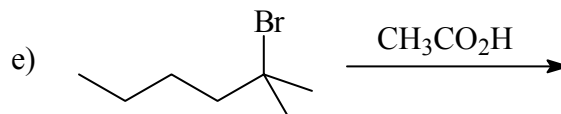
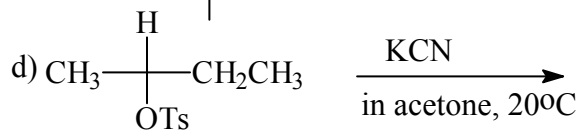
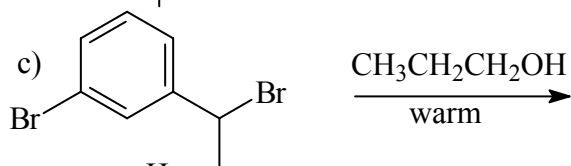
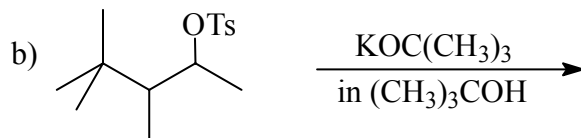
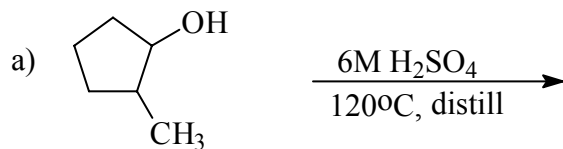
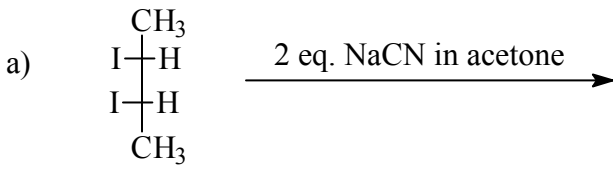
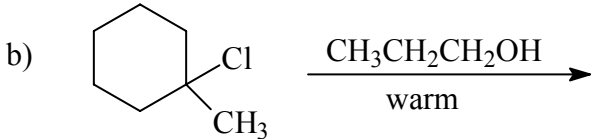
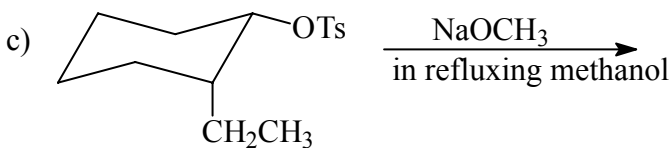
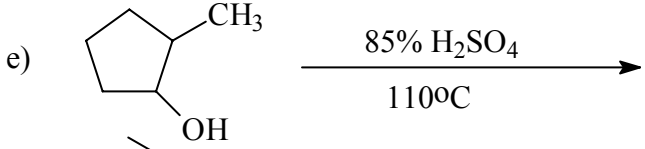
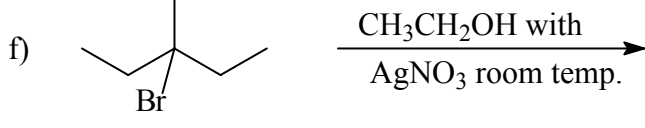
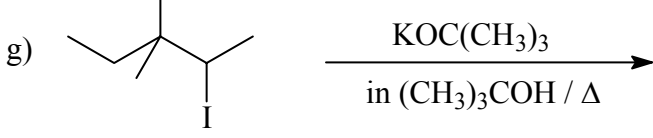
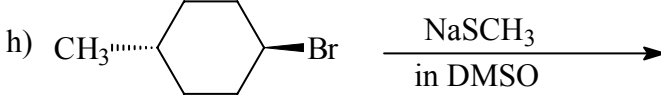
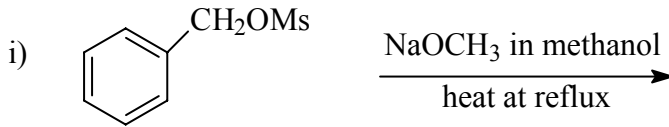


Practice reactions from CH 11 – S_N2, E2, S_N1, E1

Give the **major organic product** of the following reactions. **Also**, state the mechanism through which each reaction proceeds (e.g. S_N2). (Do not *draw out* the mechanism.)



Give the major product of the following reactions **and** indicate the mechanism (e.g. E1) through which the reaction proceeds.

- a)  CIH $\xrightarrow{2 \text{ eq. NaCN in acetone}}$ CIH CH3
- b)  ClC1CCCCC1C $\xrightarrow[\text{warm}]{\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}}$
- c)  CC1CCCC1O[S](=O)(=O)C $\xrightarrow[\text{in refluxing methanol}]{\text{NaOCH}_3}$
- d) CH3Cl $\xrightarrow{\text{NaNH}_2 \text{ in ammonia}}$
- e)  CC1CCCC1O $\xrightarrow[110^\circ\text{C}]{85\% \text{ H}_2\text{SO}_4}$
- f)  CC(C)C(Br)C $\xrightarrow[\text{AgNO}_3 \text{ room temp.}]{\text{CH}_3\text{CH}_2\text{OH with}}$
- g)  CC(C)C(I)C(C)C $\xrightarrow[\text{in } (\text{CH}_3)_3\text{COH} / \Delta]{\text{KOC}(\text{CH}_3)_3}$
- h)  C[C@H]1CCCC[C@@H]1Br $\xrightarrow[\text{in DMSO}]{\text{NaSCH}_3}$
- i)  COC(=O)Cc1ccccc1 $\xrightarrow[\text{heat at reflux}]{\text{NaOCH}_3 \text{ in methanol}}$