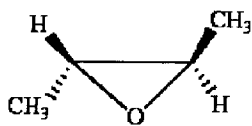


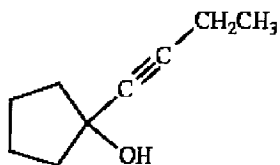
20) Describe a sequence of reactions by which *meso*-hexane-3,4-diol can be straightforwardly prepared from hex-3-yne.

21) Describe a sequence of reactions by which (*Z*)-hex-3-en-1-ol can be straightforwardly prepared from but-1-yne.

22) Describe a sequence of reactions by which the compound shown below can be straightforwardly prepared from acetylene.



23) Describe a sequence of reactions by which the compound shown below can be straightforwardly prepared from acetylene.



24) Describe a sequence of reactions by which 1-propylcyclohexan-1-ol can be straightforwardly prepared from propyne.