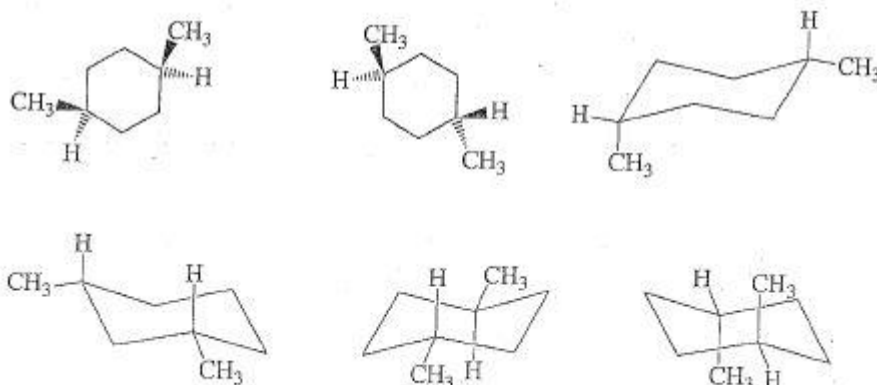
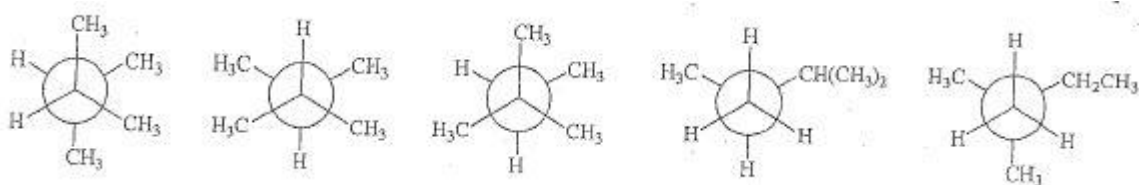


1. Identify if the following structures are the same, constitutional isomers, conformational isomers or different.

a) .



b) .



2. Use the Newman projection on the indicated bond, to draw the most stable conformer for each compound.

a) C2-C3 bond of 3- methylpentane

b) C3-C4 bond of 3,3-dimethylhexane

3. Draw the two chair conformations of each compound and label the substituents as axial and equatorial. In all cases determine the more stable conformer.
- a) (Cis)-1-ethyl-2-isopropylcyclohexane

 - b) (Trans)-1-ethyl-2-isopropylcyclohexane

 - c) (Cis)-1-ethyl-3-methylcyclohexane

 - d) (Trans)-1-ethyl-3-methylcyclohexane

 - e) (Cis)-1-ethyl-4-methylcyclohexane

 - f) (Trans)-1-ethyl-4-methylcyclohexane