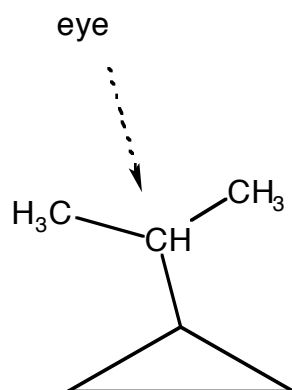
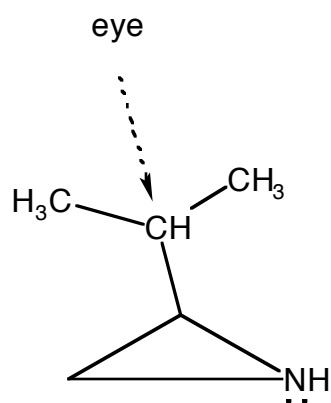


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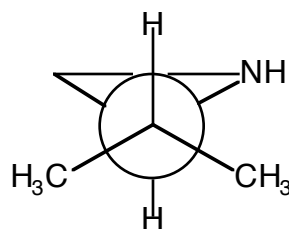
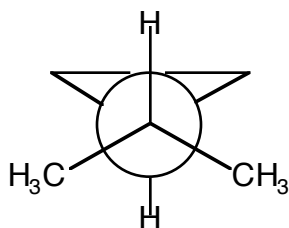
Those methyl groups in **2** can never be the same. Here are the Newman projections:



1



2



No matter how you rotate the molecule, the methyl groups remain different in **2**. They are “diastereotopic” methyl groups, and must give different signals in the NMR spectrum.