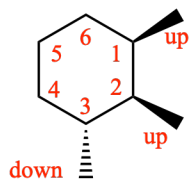
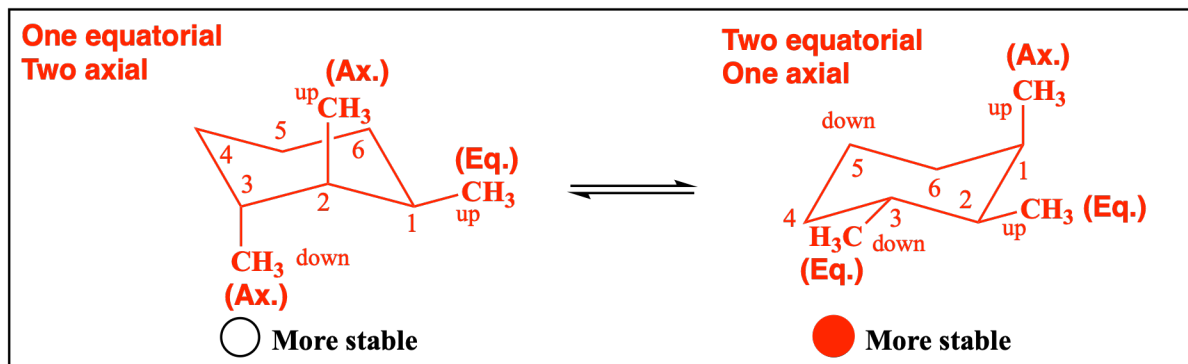


1. For the following cyclohexane derivatives, draw the two alternative chair conformations. IF there is a difference in stability, fill in the circle that says "More stable". If there is not any difference in stability, do not fill in any circle.

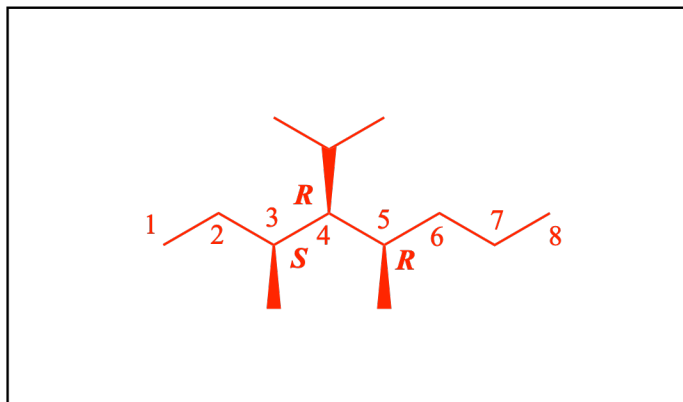


It is critical that you number in the same direction on all structures, I numbered clockwise here



2. For the following IUPAC name, draw the appropriate line angle drawing. For this one, you need to use wedges and dashes to indicate the appropriate stereochemistry at all chiral centers.

(3*S*,4*R*,5*R*)-4-Isopropyl-3,5-dimethyloctane



3. For each pair of molecules, fill in the correct circle to indicate the relationship between the two structures. Possible answers could be **enantiomers**, **diastereomers**, **constitutional isomers**, or **same molecule**. Draw a circle around any meso compound.

Relationship:

