

(20) Today

Sections 4.3 – 4.8 Stability of Cycloalkanes
and Conformations of Cyclohexanes

Sections 5.1 – 5.5

Chirality and Determining the Configuration of
Chiral Centers

Next Class (21)

Sections 5.1 – 5.5

Chirality and Determining the Configuration
of Chiral Centers

Sections 5.6 – 5.12

Diastereomers, N,P, and S, and Prochirality

(22) Second Class from Today

Sections 5.6 – 5.12

Diastereomers, N,P, and S, and Prochirality

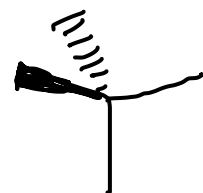
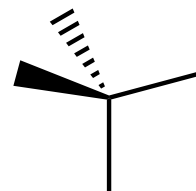
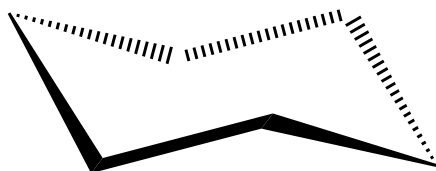
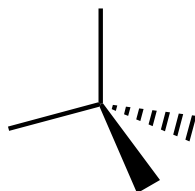
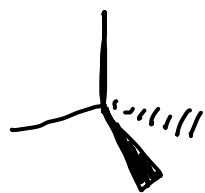
Third Class from Today (23)

Test 2

Low E conformation

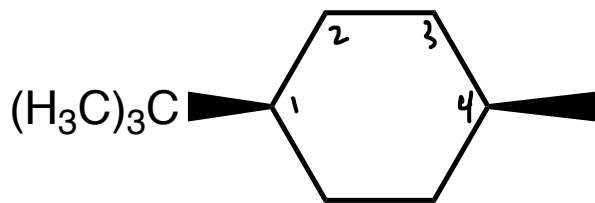
Drawing Conformations of Substituted Cyclohexanes

Section 4.3 – 4.8



Things to keep in mind while drawing cyclohexane conformations

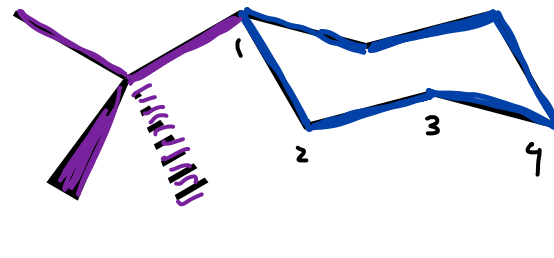
1. Draw chair
2. Find largest substituent and draw in eq. position on the C atom of your choice
3. Count in the correct direction and determine where next substituent goes



rotate 90°
↓

so $\text{C}(\text{CH}_3)_3$ points down and C_2

+ C_5 move to 11 front of screen

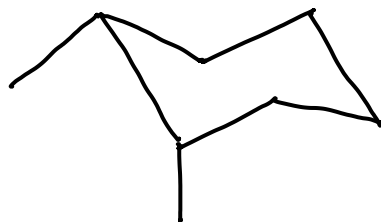
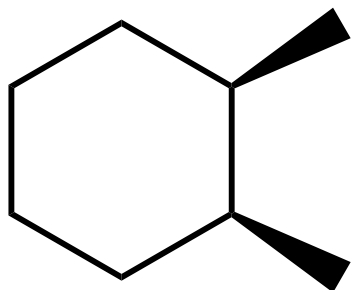


4. draw substituent while maintaining cis/trans relationship

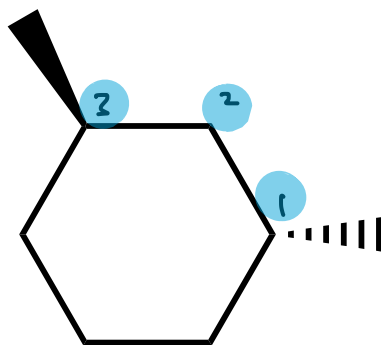
Drawing Conformations of Substituted Cyclohexanes

Section 4.3 – 4.8

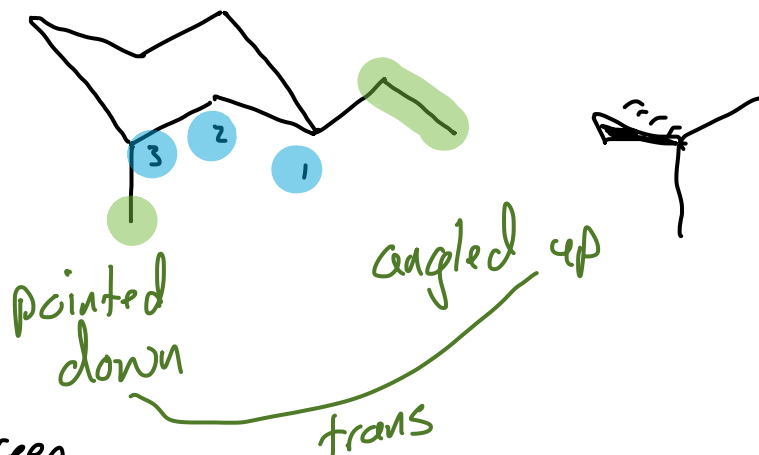
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2. Find largest substituent and draw in eq. position on the C atom of your choice
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4. draw substituent while maintaining cis/trans relationship

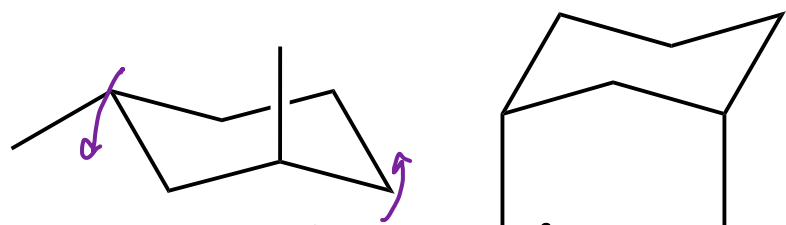


molecule rotated
by 90° so
 CH_2CH_3 pointing
up and $\text{C}_2 + \text{C}_3$
are in front of screen



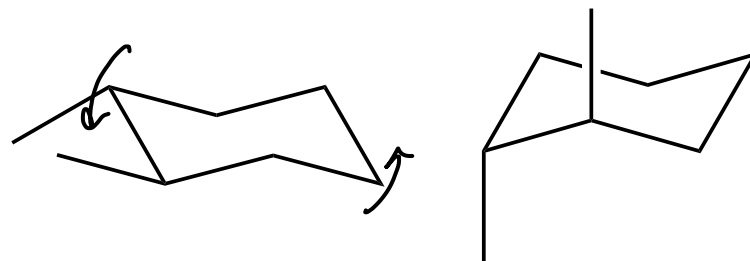
Which of the Following Pairs Represent Ring-flipped Cyclohexanes

Section 4.3 – 4.8



lower E

different molecules

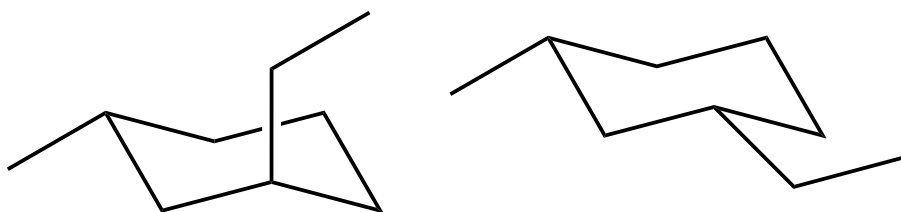


di-eg

vs di-axial

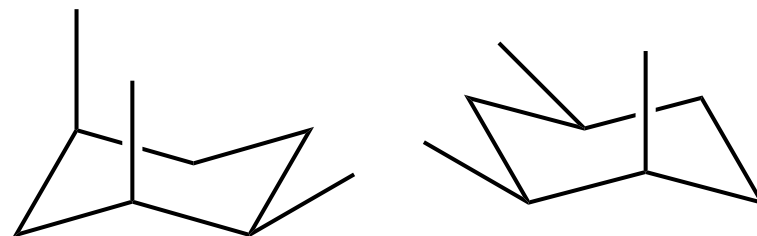
lower E

diff conformations of the same molecule



diff molecules

lower E



diff conformations of same molecule
lower E