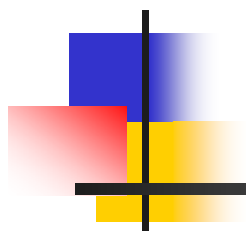


Organic Chemistry I:

CHEM 233



Dr. Xiaodong Michael Shi

Section 001

MWF, 9:30 am--10:20 am

Clark 112

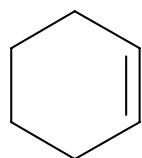
Problem set

- 6.23, 6.24, 6.25, 6.26, 6.27, 6.29, 6.30,
6.33, 6.34, 6.37, 6.38, 6.42, 6.44, 6.46,
6.48

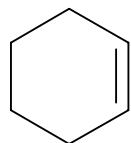
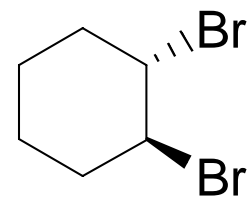
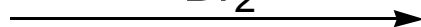


Chapter VI: Organic Reactions

- 6.1 Equations for organic reactions

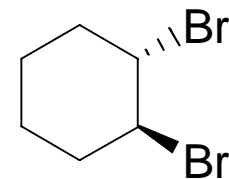


Br_2



+

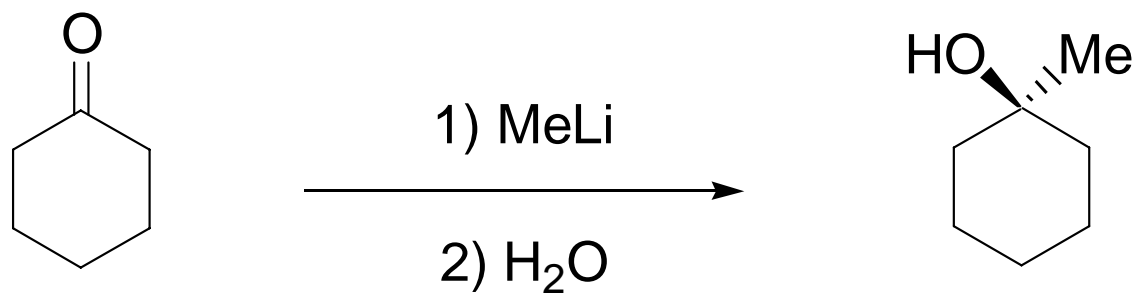
Br_2





Chapter VI: Organic Reactions

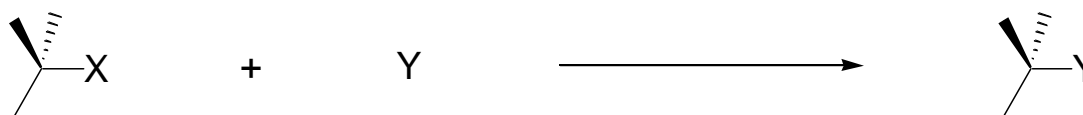
- 6.1 Equations fro organic reactions





Chapter VI: Organic Reactions

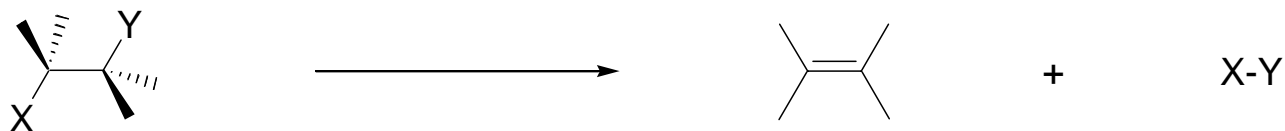
- 6.2 Types of Organic Reactions
 - Substitution reactions





Chapter VI: Organic Reactions

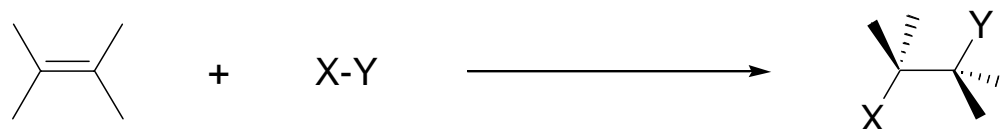
- 6.2 Types of Organic Reactions
 - Elimination





Chapter VI: Organic Reactions

- 6.2 Types of Organic Reactions
 - addition





Chapter VI: Organic Reactions

- 6.3 Bond breaking



Chapter VI: Organic Reactions

- 6.3 Bond making



Chapter VI: Organic Reactions

- 6.3 All arrows



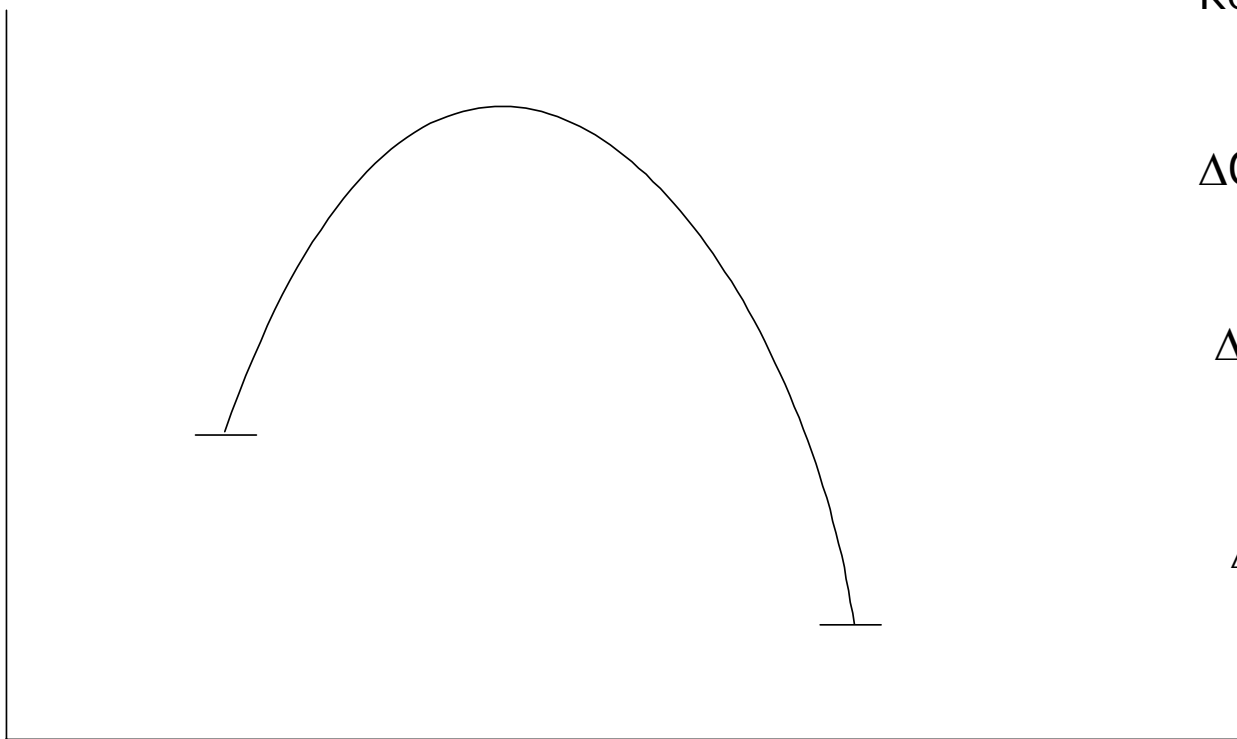
Chapter VI: Organic Reactions

- 6.4 Bond dissociation energy



Chapter VI: Organic Reactions

- 6.5 Thermodynamic

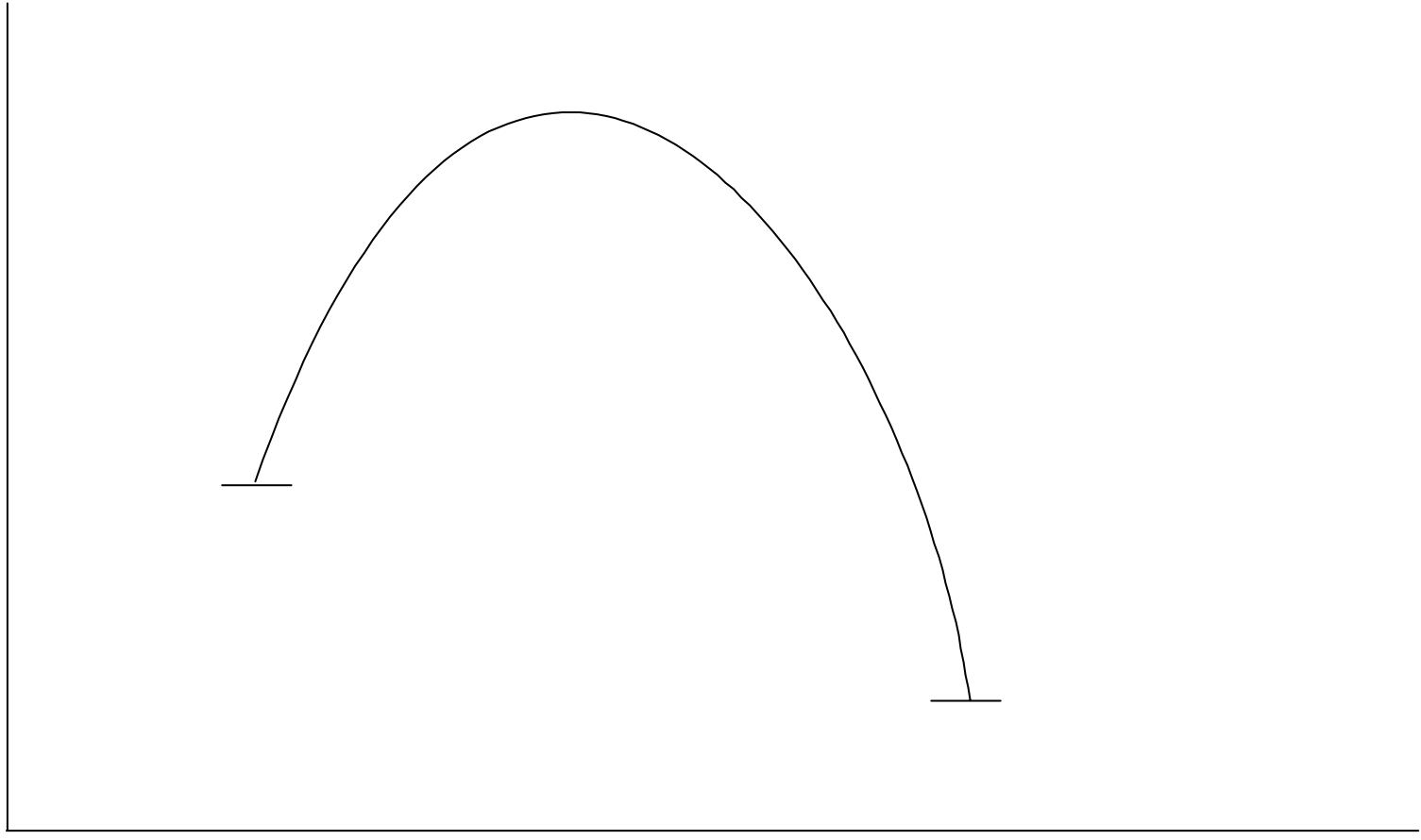


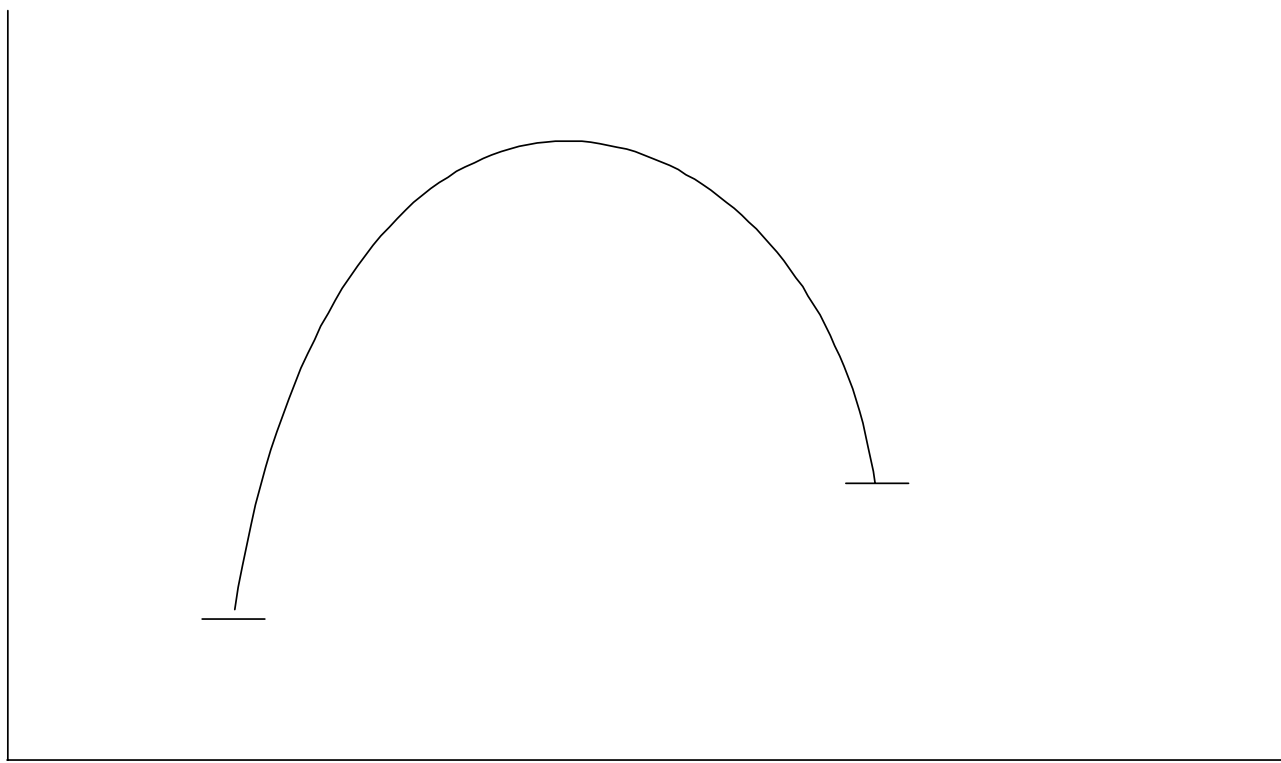
$$K_{eq} = \frac{[\text{product}]}{[\text{S.M.}]}$$

$$\Delta G = G_{\text{products}} - G_{\text{reactants}}$$

$$\Delta G = \Delta H - T\Delta S$$

$$\Delta G = -RT \ln K_{eq}$$







Chapter VI: Organic Reactions

- 6.5 conformation changes



Chapter VI: Organic Reactions

- 6.6 Enthalpy and Entropy

$$\Delta G = \Delta H - T\Delta S$$



Chapter VI: Organic Reactions

- 6.7 Energy Diagrams: Kinetic vs Thermodynamic



Chapter VI: Organic Reactions

- 6.8 Energy Diagrams for two-step reactions



Chapter VI: Organic Reactions

- 6.9 Kinetics:
 - Rate Law



Chapter VI: Organic Reactions

- 6.10 Catalysis



Chapter VI: Organic Reactions

- 6.11 Enzyme

