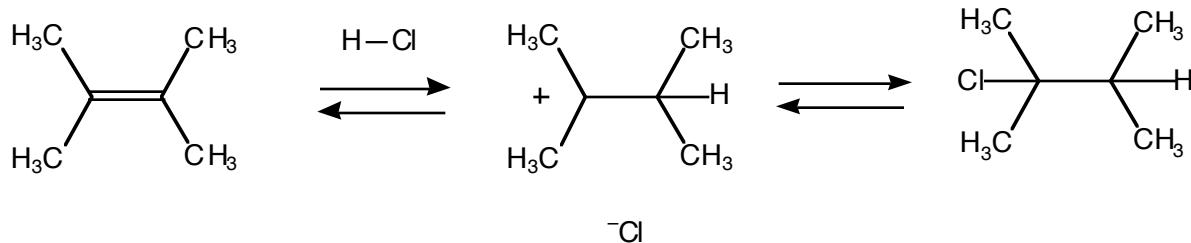


Problem 27, Chemistry 301X - 2006



For each reaction in this two-step sequence, tell us if the process is exothermic or endothermic and by approximately how much.

Here are some bond energies in kcal/mol that may be useful:

$$\text{H}-\text{Cl} \quad 103$$

$$\text{C}=\text{C} \ (\pi) \quad = \quad 66$$

$$\text{C}-\text{H} \quad = \quad 95-100$$

$$\text{C}-\text{Cl} \quad = \quad 85$$