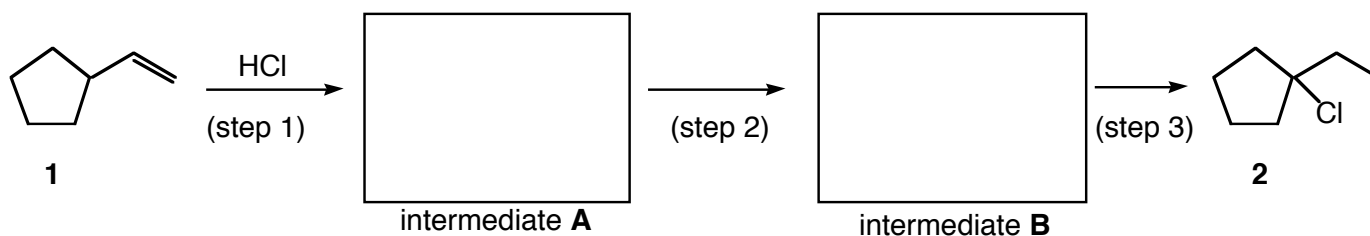


Problems from your text

6.3, 6.4, 6.5, 6.7, 6.10, 6.11, 6.14, 6.16, 6.18, 6.19, 6.24, 6.26, 6.29, 6.35, 6.39, 6.41, 6.42, 6.44, 6.49, 6.53

Additional Practice Problems

1. a) In the following reaction of the addition of HCl to vinylcyclopentane (**1**), one of the major products formed is 1-chloro-1-ethylcyclopentane (**2**). The mechanism for this reaction involves the formation of intermediate **A** which is converted into intermediate **B** and finally the product **2** is formed. In the boxes below, draw the structures of the intermediates showing any charges that are present.



- b) The following diagram describes the reaction above. On the diagram, label the position of each compound in the reaction including the starting material **1**, the product **2**, and intermediates **A** and **B**. In addition, graphically show ΔG° and ΔG^\ddagger for this reaction on the diagram using an arrow.

