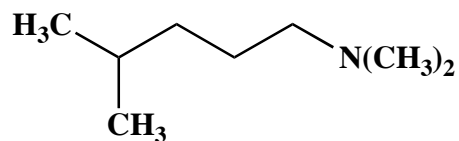


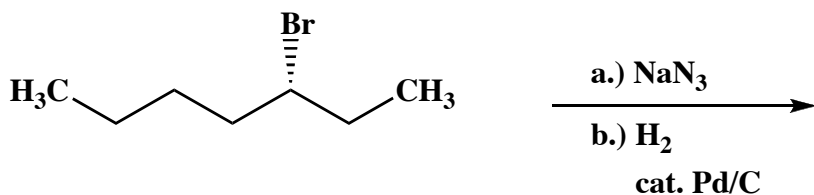
## Problem Set 15

1. Use IUPAC nomenclature to write the systematic name of the following amine.

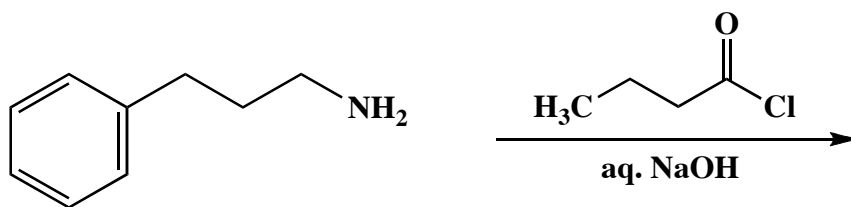


2. Draw the structure of the expected major organic product for each of the following three questions.

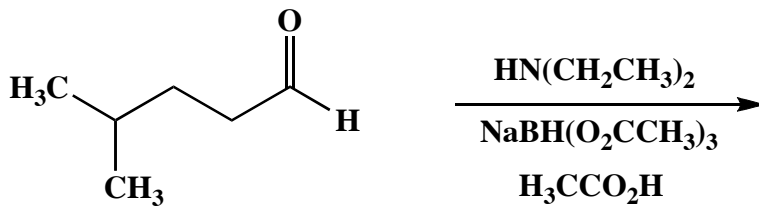
A.



B.



C.



3. Draw the mechanism of reaction 2C, using the curved-arrow notation to indicate the reorganization of electron density. Denote **all** intermediates, lone pairs, nonzero formal charges, countercharges, and reversibility or nonreversibility. Describe the role of acetic acid in this reaction. Also explain why sodium triacetoxyborohydride is used instead of sodium borohydride.