

* VIII-2 ____C ____NC
** VIII-3 ____C ____NC

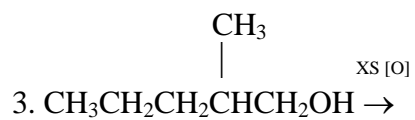
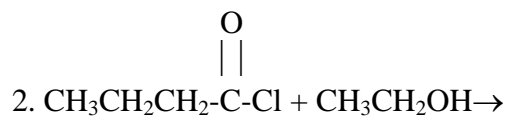
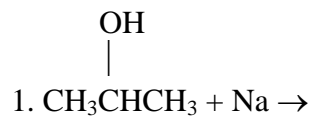
Chemistry 152
Worksheet 12

Name: _____

- A. (4.0 pts.) Classify and give an acceptable name for each of the following compounds. (The possibilities for classification are: **3°alcohol, 1°alcohol, carboxylic acid, acid chloride.**)

| Compound | Classification | Name |
|--|----------------|------|
| $\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3\text{-C-CH}_2\text{OH} \\ \\ \text{CH}_3 \end{array}$ | | |
| $\begin{array}{c} \text{OH} \\ \\ \text{CH}_3\text{CH}_2\text{-C-CH}_2\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$ | | |
| $\begin{array}{c} \text{O} \\ \\ \text{CH}_3\text{CH}_2\text{CH}_2\text{-C-Cl} \end{array}$ | | |
| $\begin{array}{c} \text{CH}_3 \quad \text{O} \\ \quad \\ \text{CH}_3\text{-C-CH}_2\text{-C-OH} \\ \\ \text{CH}_3 \end{array}$ | | |

- *B. (3.0 pts.) Give the condensed formula and an acceptable name for the organic product(s) expected for each of the following reactions.



- **C. (3.0 pts.) Outline the synthesis for each of the following compounds.

1. 2-methyl-2-pentanol

