Week 6 Worksheet

1. Consider the hydrolysis of the following ester.

A)

\[
\begin{align*}
\text{CH}_3\text{CO}_2\text{H} + \text{H}_2\text{O} &\rightarrow \text{CH}_3\text{CH}_2\text{CO}_2\text{H} + \text{H}_3\text{O}^+ \\
\text{Acid Catalyzed} &\rightarrow \text{Base Promoted}
\end{align*}
\]

B) What additional reagent was used in the acid catalyzed reaction? The base promoted?

2.) Show the mechanism for the following reaction

3) Provide reagents for the following reaction.
4. Provide a detailed mechanism for the base promoted hydrolysis of esters known as Saponification.