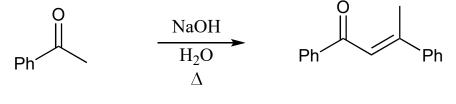
CHM 3150, Spring 2024 Dr. Laurie S. Starkey

5A. (14 pts) Provide a <u>complete</u> mechanism to account for the formation of the product shown. Pay close attention to details, including lone pairs, formal charges and the use of curved arrows.



5B) (7 pts) Do you expect the substituent shown to be an ortho/para director or a meta director in the Electrophilic Aromatic Substitution (EAS) reaction? Two possible intermediates (sigma complexes) are shown below. Compare their stabilities and use additional drawings to support your answer.

 $CF_3 \leftarrow CF_3 \leftarrow CF_3$ ortho/para or meta director? Explain, and use the drawings below to support your answer.

