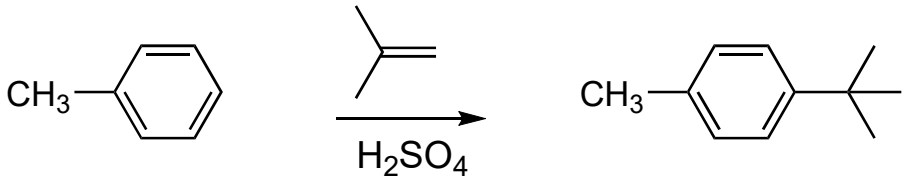
California State Polytechnic University, Pomona
Organic Chemistry II, CHM 3150, Dr. Laurie S. Starkey
Electrophilic Aromatic Substitution (EAS) Homework II

Name:_____ Section:_____ (day/time)



A) Provide a <u>complete</u> mechanism for the above Friedel-Crafts Reaction.
Pay close attention to details, including lone pairs, formal charges and the use of curved arrows.

B) Why is the methyl group in toluene an ortho/para director? Explain, using the reaction mechanism and drawings to support your answer. *Add an electrophile (you can use E^+) to the ortho, meta, or para position, and compare the stabilities of the competing carbocation intermediates (the three possible sigma complexes).*