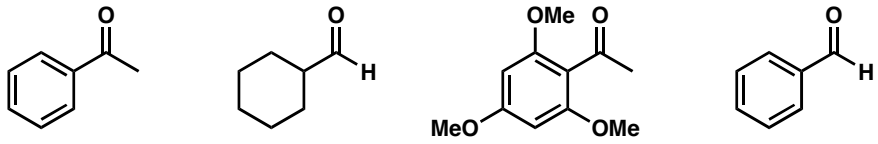
Chem 41c Quiz 2

Stoltz, Spring 2006
April 14, 2006

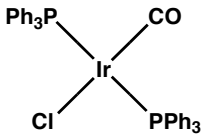
In the following complexes, what is the formal oxidation state of the metal, the d^n description, and the electron count? Feel free to use the periodic table in the room (no partial credit-5 points each)

1. The following compounds are treated with EtMgBr. Rank them from most reactive to least reactive. Most reactive = 1, Least Reactive = 4. (5 points)



____ ____ ____ ____

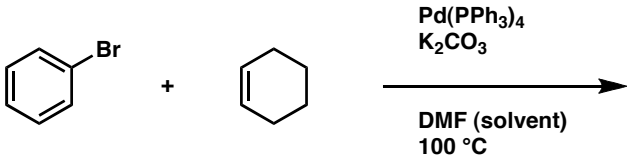
2. For the following complex, what is the formal oxidation state of the metal, the d^n description, and the electron count? Feel free to use the periodic table in the room (5 points)



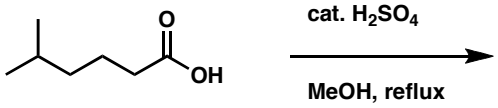
oxidation state ____ d^n ____ electron count ____

Predict the products (if any) of the following reactions: (5 points each)

3.



4.



Bonus (5 points)
Bonus: What is the driving force for the formation of product in problem 4?