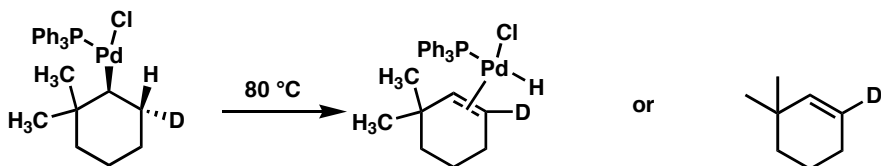


Chem 41c Quiz 1

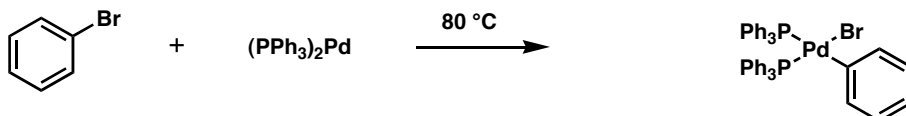
Stoltz, Spring 2004
April 5, 2004

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

1.

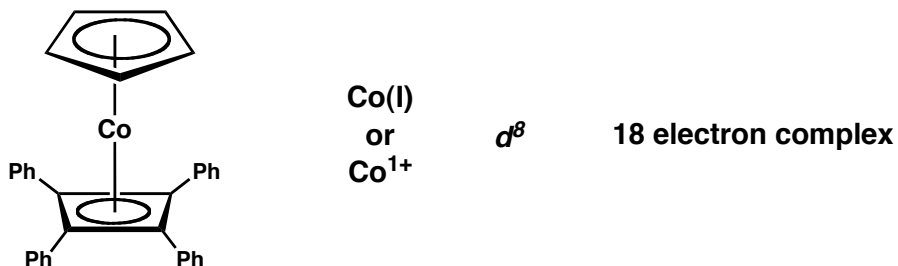


2.

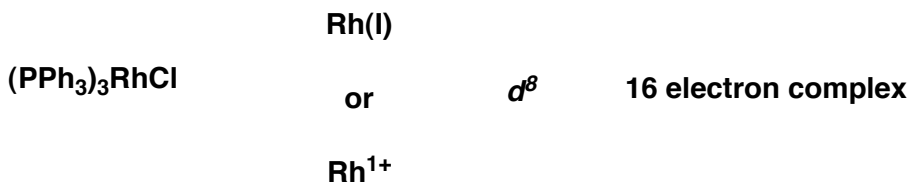


In the following complexes, what is the formal oxidation state of the metal, the d^n description, and the electron count? Feel free to use the periodic table in the room (no partial credit)

3.

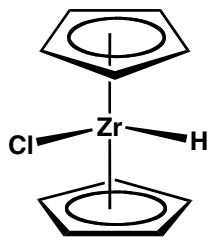


4.



Bonus (5 points)

The complex below is commonly called Schwartz' reagent and is useful for many organic transformations. 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)



Zr(IV)
or
Zr⁴⁺

d^0

16 electron complex