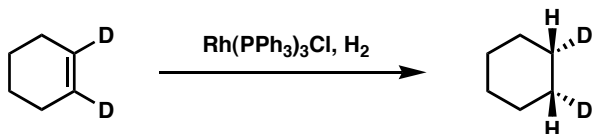


# Chem 41c Quiz 1

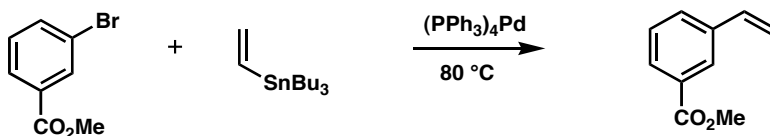
Stoltz, Spring 2004  
April 5, 2004

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

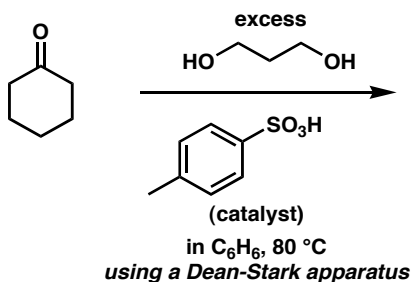
1.



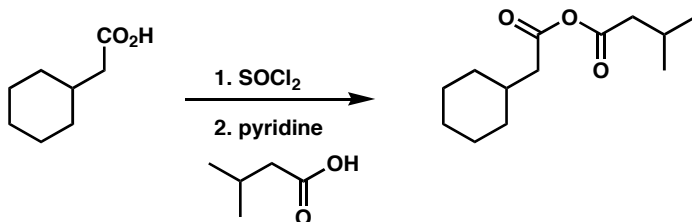
2.



3.

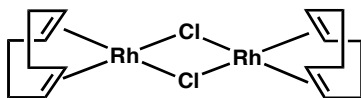


4.



## Bonus (5 points)

In the OCS seminar Wednesday afternoon by Professor Cathy Crudden from Queen's University in Canada, she mentioned the use of the dimeric rhodium catalyst below. What is the formal oxidation state of each metal (hint: they are the same), the  $d^n$  description, and the electron count for each metal? Feel free to use the periodic table in the room (no partial credit)



Rh(I)  
or  
Rh<sup>+</sup>

$d^8$

16 electron each Rh