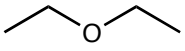
Name _____ Test 3

PHYS 0203 Spring 2004

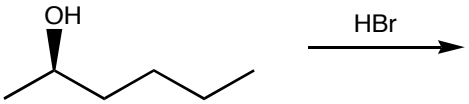
THF = 

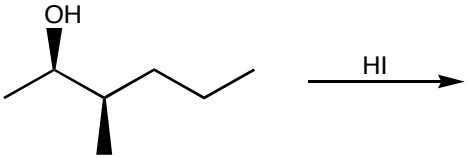
Et = CH_3CH_2

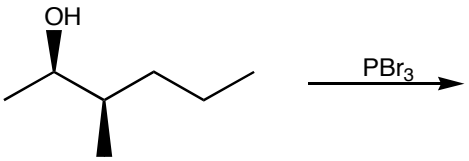
Me = CH_3

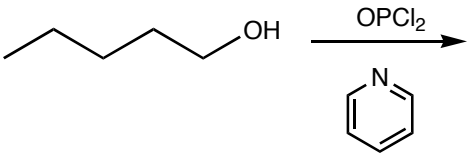
Et_2O = 

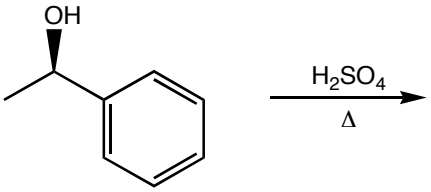
1. (6 pts. ea.) Predict the products of the following reactions (remember to consider the stereochemistry of the product where appropriate).

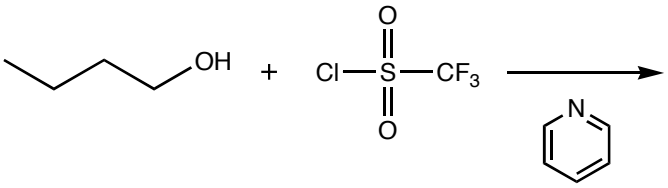
a. 

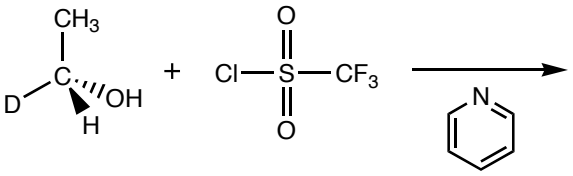
b. 

c. 

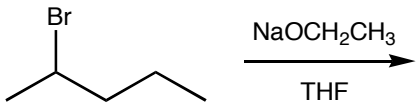
d. 

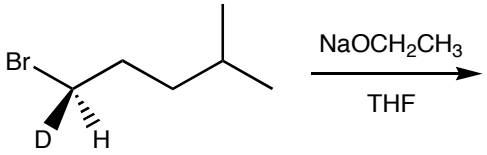
e. 

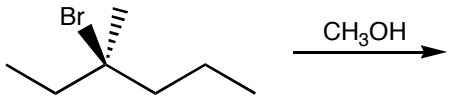
f. 

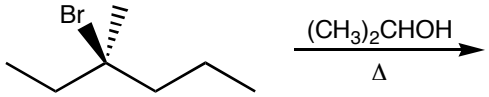
g. 

2. (7 pts. ea.) Determine the products of the following reactions (remember to consider stereochemistry where appropriate).

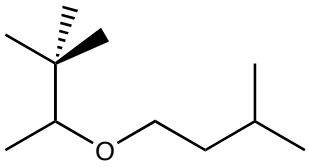
a. 

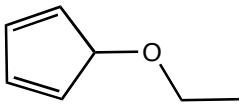
b. 

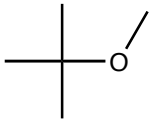
c. 

d. 

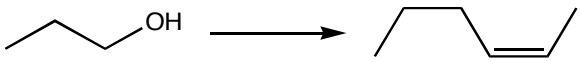
3. (6 pts. ea.) Synthesize the following ethers from an alkoxide and an alkyl halide.

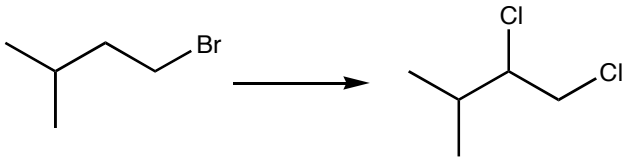
a. 

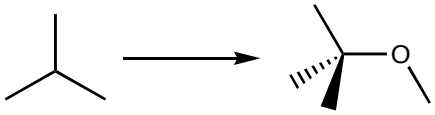
b. 

c. 

4. (6 pts. ea.) Synthesize the following compounds from the indicated starting materials and any other reagents needed.

a. 

b. 

c. 

5. (8 pts.) Draw a mechanism for the following reaction.