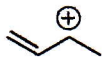
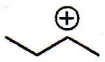
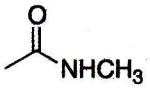
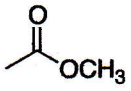
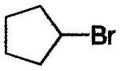
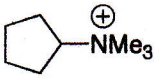
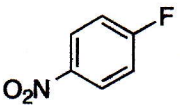
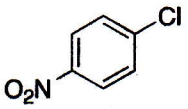
3. (10 points) For each of the following pairs, circle the better electrophile (in a polar solvent):

brief explanation:

a)  vs. 

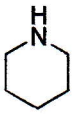
b)  vs. 

c)  vs. 

d)  vs. 

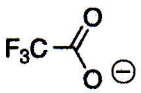
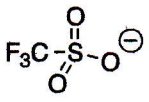
e) BF_3 vs. BCl_3

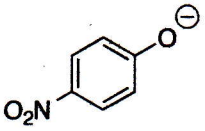
4. (10 points) For each of the following pairs, circle the better leaving group:

a)  vs. 

b)  vs. 

c)  vs. 

d)  vs. 

e)  vs.