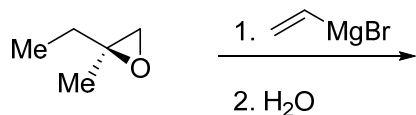
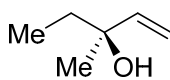


Name: _____

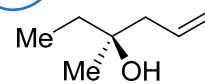
1. Circle the major product for the following reaction. (1 point)



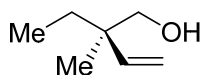
a.



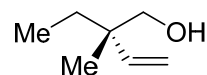
b.



c.

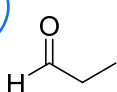


d.



2. Circle the starting material for the following reaction. (1 point)

a.



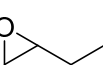
b.



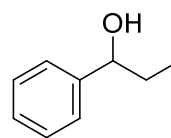
c.



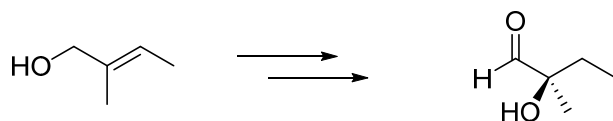
d.



1.

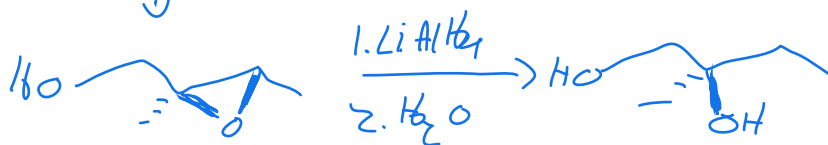
2. H_2O 

3. Provide an asymmetric synthesis for the following transformation. (4 points)

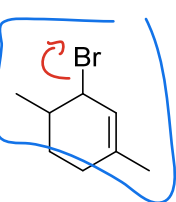


Sharpless
(+)-DET

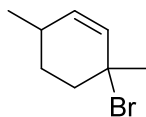
PCC



4. a. Provide a mechanism to account for the following equilibrium.



40 °C



Favored - more substituted alkene is more stable

