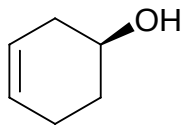
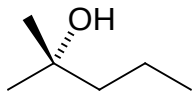
Chem 212
Alcohols and Ethers Problems

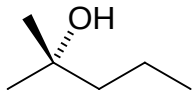
1. Provide products for the following reactions.

a. 

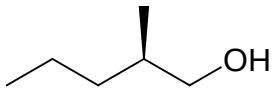
NaH →

b. 

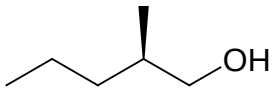
H_2SO_4 → H_2O, Δ

c. 

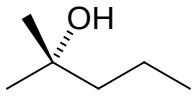
HBr →

d. 

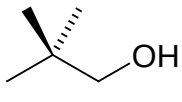
PBr_3 →

e. 

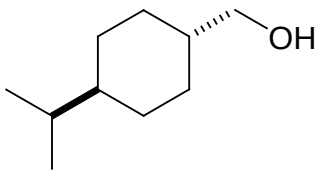
CrO_3 → H_2SO_4

f. 

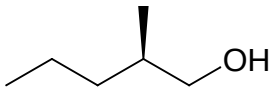
$Na_2Cr_2O_7$ →

g. 

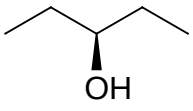
1) NaH → 2) MeBr

h. 

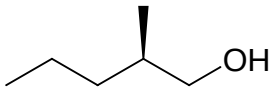
$SOCl_2$ → pyr

i. 

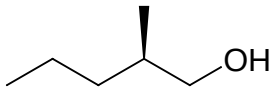
Me_3SiCl → Et_3N

j. 

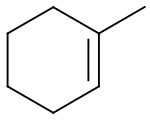
PhMgBr →

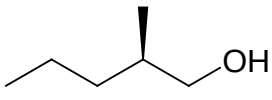
k. 

TsCl, pyr →

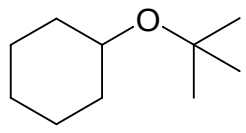
l. 

PCC →

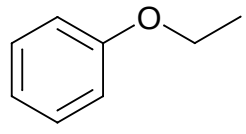
m. 
1) $Hg(O_2CCF_3)_3$, propanol → 2) $NaBH_4$

n. 

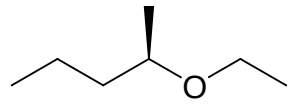
H_2SO_4 →

o. 

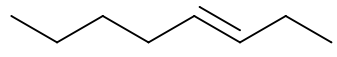
CF_3CO_2H →

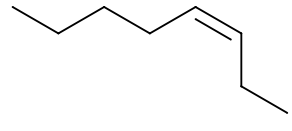
p. 

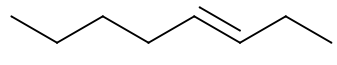
HBr →

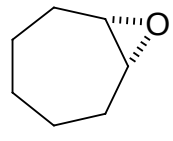
q. 

HI →

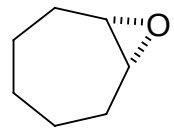
r. 
mCPBA →

s. 
mCPBA →

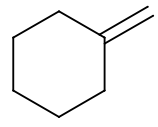
t. 
1) Cl_2, H_2O → 2) NaOH

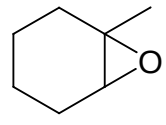
u. 

KOH, H_2O →

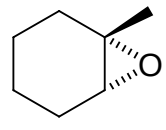
v. 

1) PhMgBr → 2) H_3O+

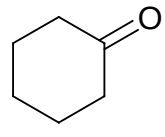
w. 
1) mCPBA → 2) NaOEt, EtOH

x. 

HBr, ether →

y. 

1) $LiAlH_4$ → 2) H_3O+

z. 

1) MeMgBr
2) H_3O+
→
3) H_2SO_4, Δ
4) 1,3-butadiene, heat
5) mCPBA
6) NaOH, H_2O