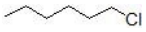
7.23: SOLUTIONS TO ADDITIONAL EXERCISES

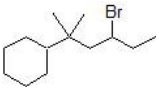
SN2

7-1

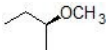
a) 

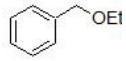
b) 

c) 

d) 

7-2

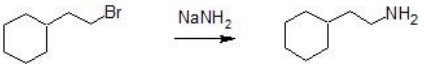
a) 

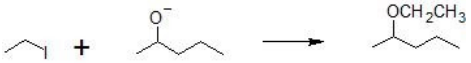
b) 

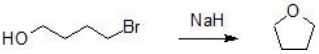
c) No reaction

d) 

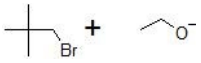
7-3

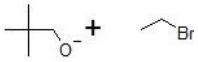
a) 

b) 

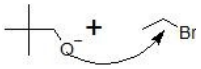
c) 

7-4

First method: 

Second method: 

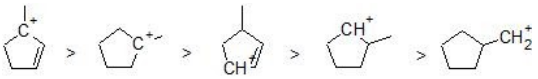
7-5 The second method is more efficient since the alkyl halide is not sterically hindered



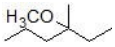
7-6 $H_2O < NH_2^- < CH_3CH_2O^- < CH_3O^-$

SN1

7-7

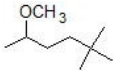


7-8

a) 

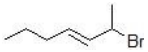
b) 

c) No reaction

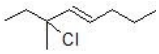
d) 

7-9

a) 

b) 

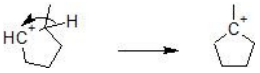
c) 

d) 

7-10

a) 

b) 

c) 

d) 

SN2 VS SN1

7-11

a) S_N2

b) S_N2

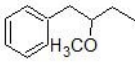
c) S_N1

d) S_N1

7-12

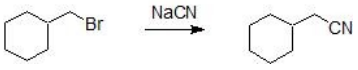
a) 

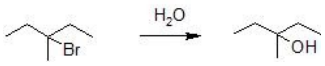
b) 

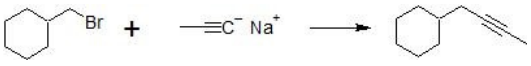
c) 

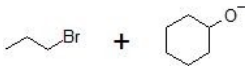
d) 

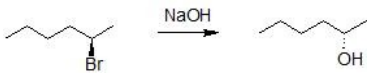
7-13

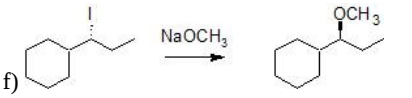
a) 

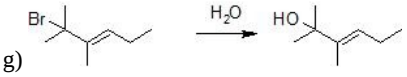
b) 

c) 

d) 

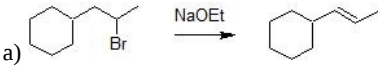
e) 

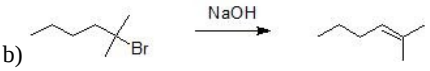
f) 

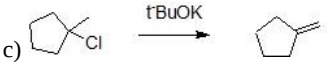
g) 

E2 VS E1

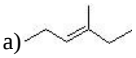
7-14

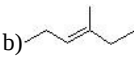
a) 

b) 

c) 

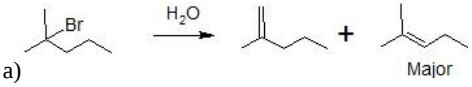
7-15

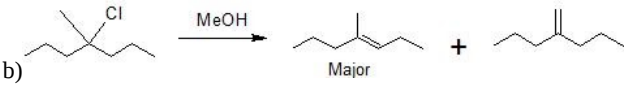
a) 

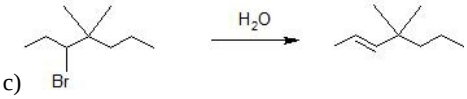
b) 

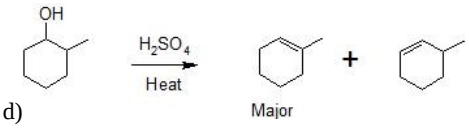
c) 

7-16

a) 

b) 

c) 

d) 

SUBSTITUTION VS ELIMINATION

7-17

a) Cl^- ; strong nucleophile

b) NaH ; strong base

c) t-BuO^- ; strong base

d) OH^- ; strong nucleophile ; strong base

e) H_2O ; weak nucleophile ; weak base

f) HS^- ; strong nucleophile

g) MeOH ; weak nucleophile ; weak base

7-18

a) E2, S_N1

b) S_N2, E2

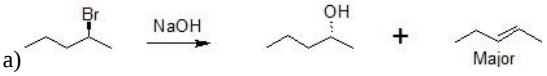
c) S_N2

d) S_N1, E1

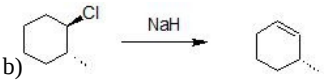
e) E2, S_N1

7-19

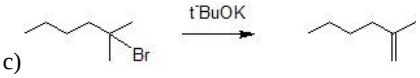
a)



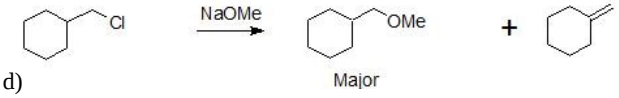
b)



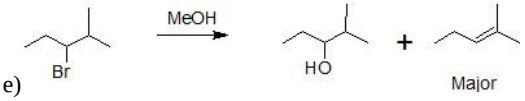
c)



d)



e)



7-20