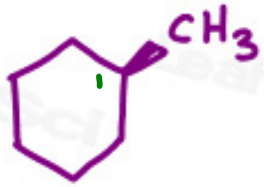
Note Title 6/22/2017

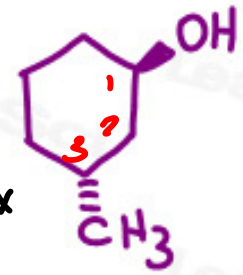
Chair Conformations Quiz

Part 1

a) 

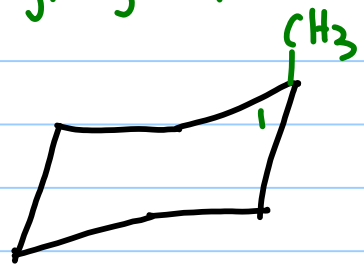
b)

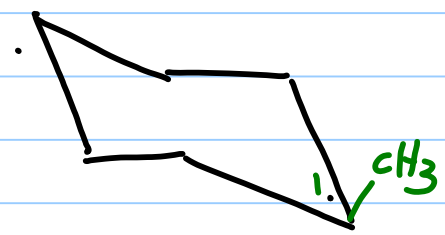
dashes down

c) 

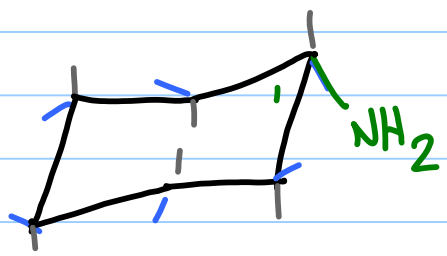
cyclohexanol
3-methyl

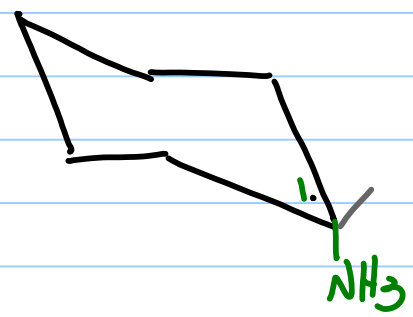
① a) methylcyclohexane



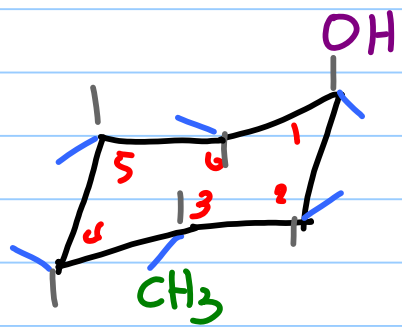


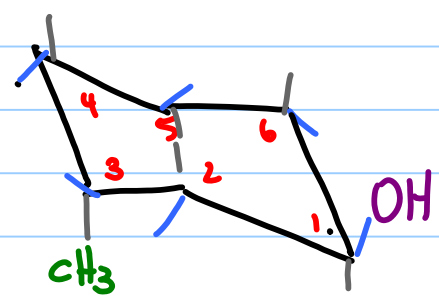
b) cyclohexanamine





c) 3-methylcyclohexanol



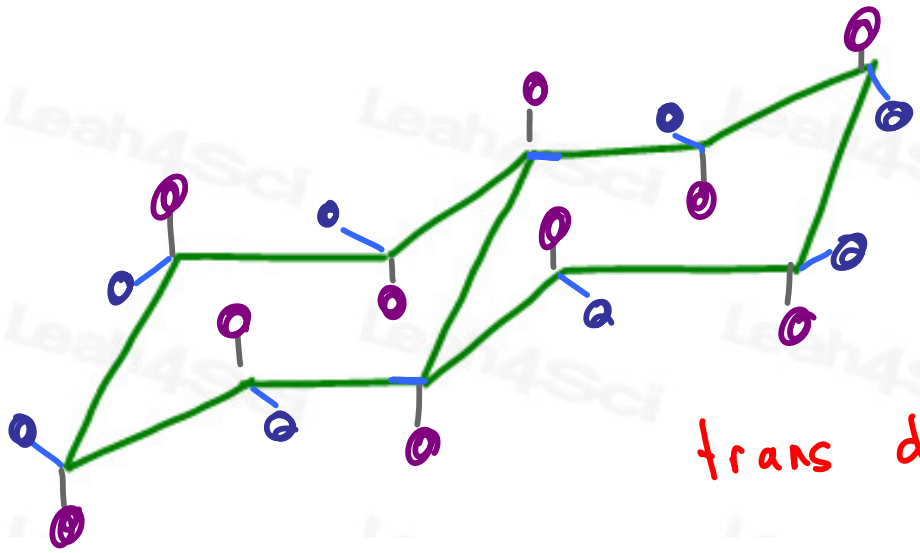


1 = ↑ OH 3 = ↓ CH3

2

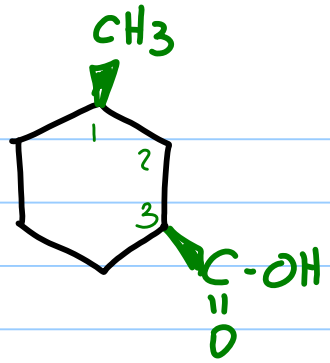
Ax H = 10

Eq H = 8

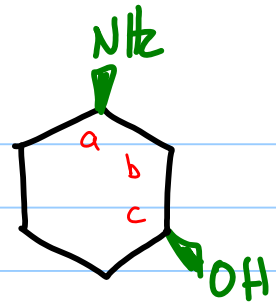


trans decalin

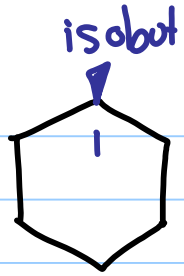
a)


CH3
1
2
3
C-OH
O

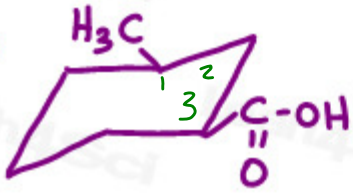
b)


NH2
a
b
c
OH

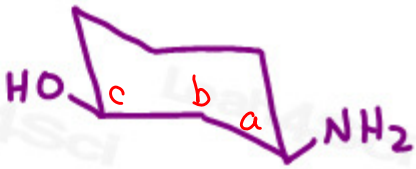
c)


isobut
1

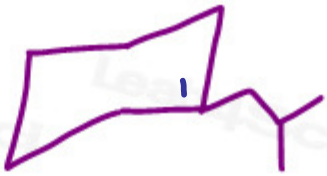
a)


H3C
1
2
3
C-OH
O

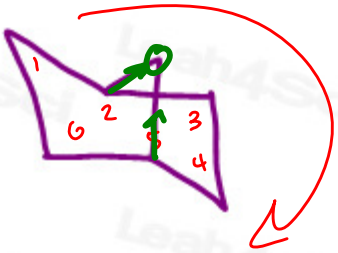
b)


HO
c
b
a
NH2

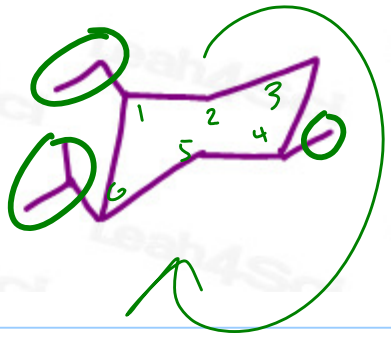
c)


1

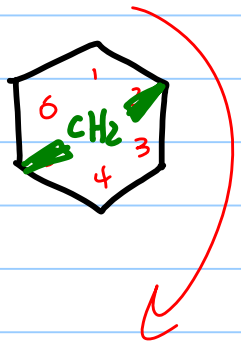
d)


1
2
3
4
5
6

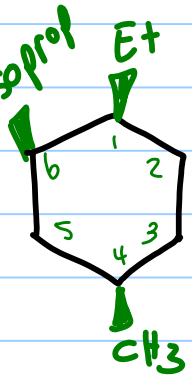
e)


1
2
3
4
5
6

d)


1
2
3
4
5
6
CH2

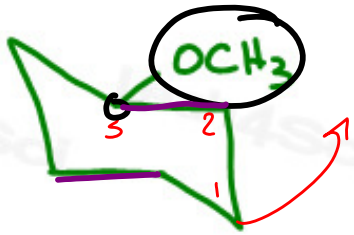
e)


isoprop
Et
1
2
3
4
5
6
CH3

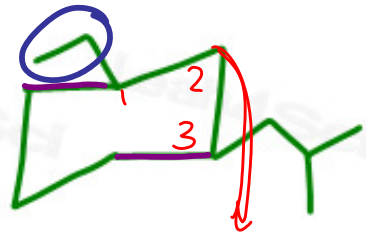
Part 2

4

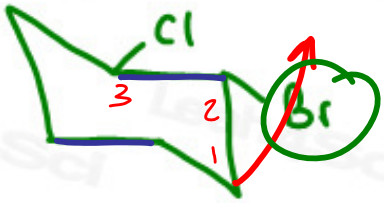
a)



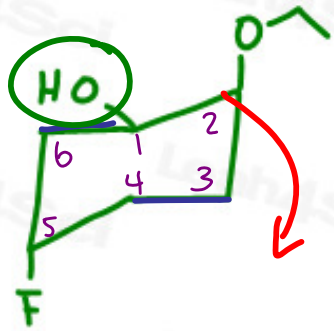
b)



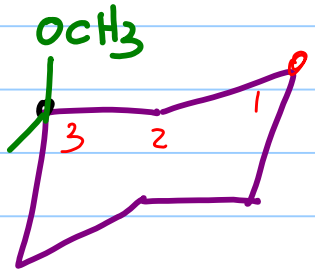
c)



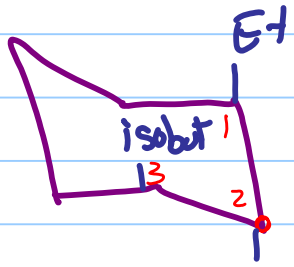
d)



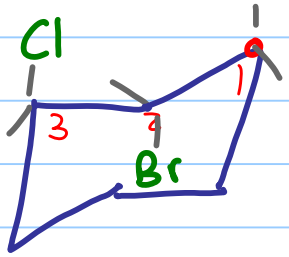
a)



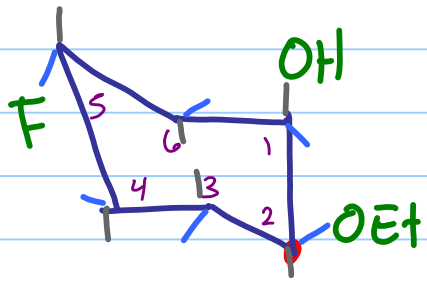
b)



c)

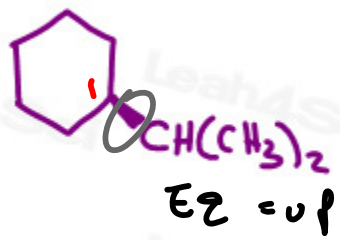


d

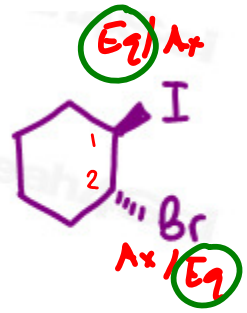


(5)

a)

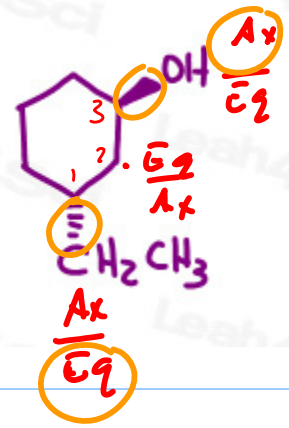


b)

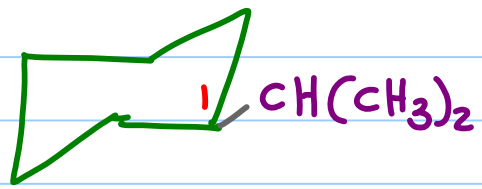


F
Cl
Br
I

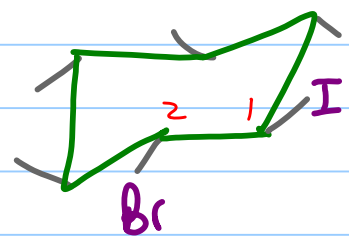
c)



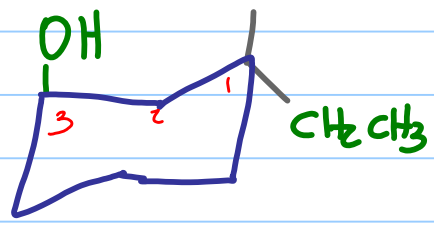
a)



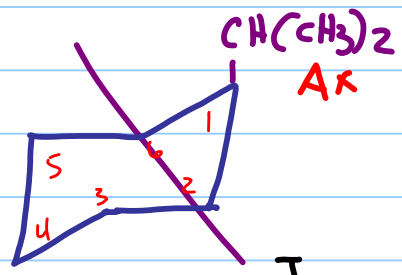
b)

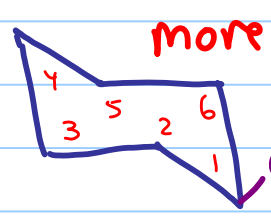


c)

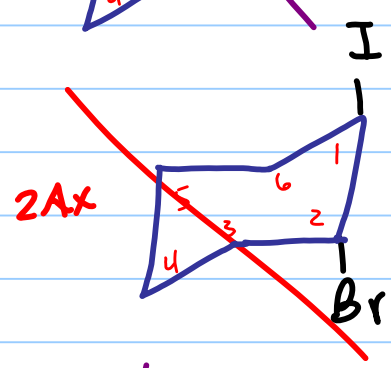


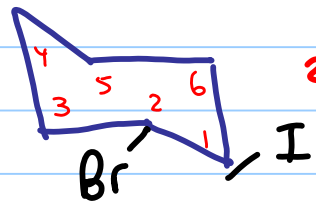
a)





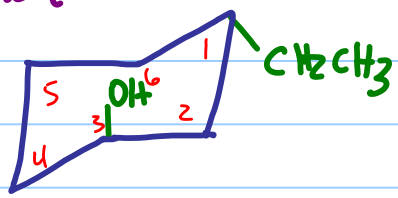
b)

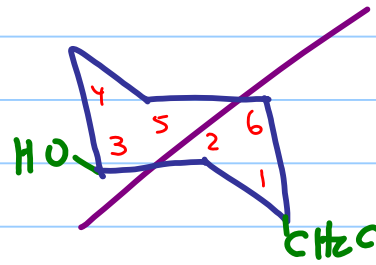




more stable

c) 1Ax
1Eq



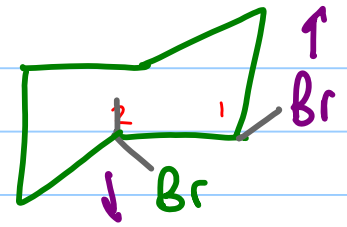


1Ax
1Eq

⑥

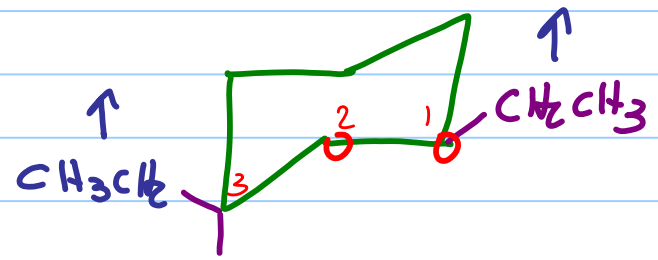
a) 1,2 - dibromocyclohexane

trans = more stable



b) 1,3 - diethylcyclohexane

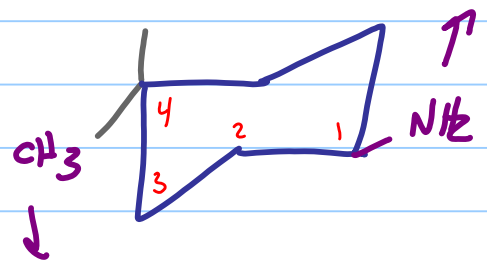
cis = more stable



c) 4-methylcyclohexanamine

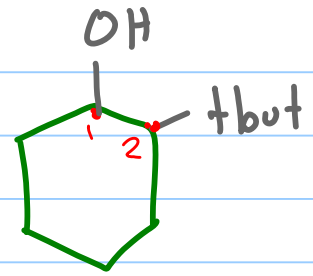
#1

trans = more stable



Part 3

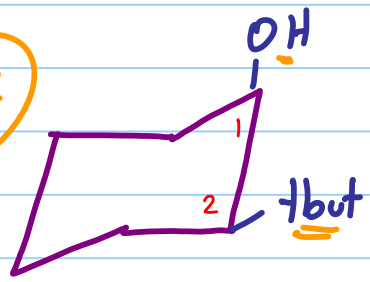
7 2-tertbutylcyclohexanol



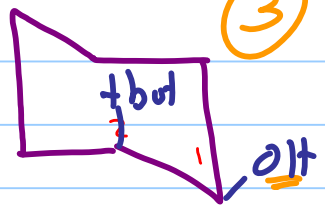
	OH	tbut		
cis	↑	↑	+ flip	1 = most stable
trans	↑	↓	+ flip	4 = least stable

2

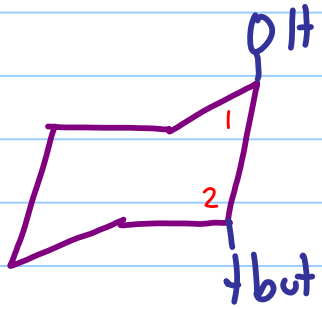
1Ax
1Eq



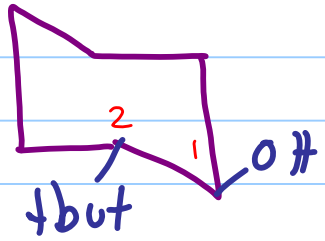
3



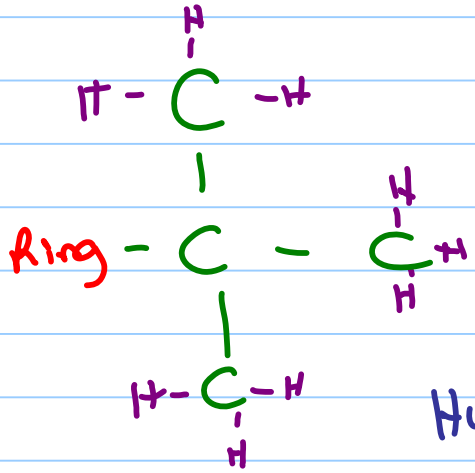
1Ax
1Eq



2Ax
= 4



2eq = 1

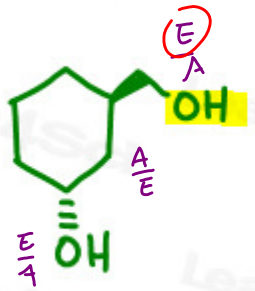


Ring — O - H
small

Huge

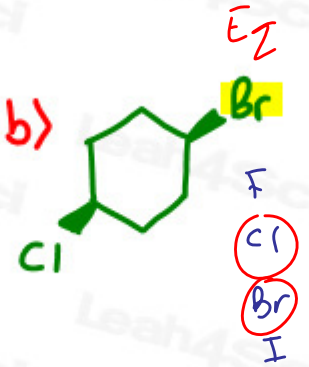
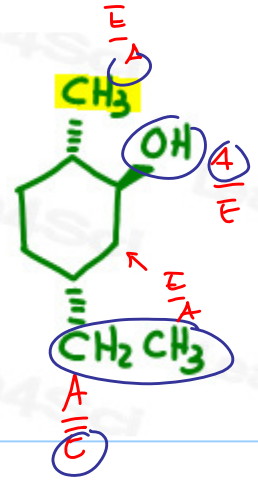
8

a)



equatorial

b)



c)