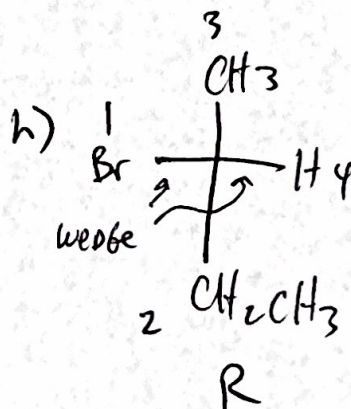
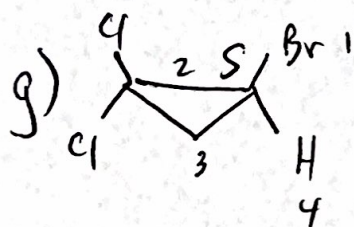
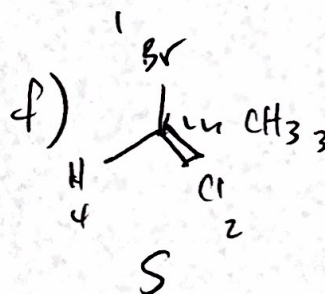
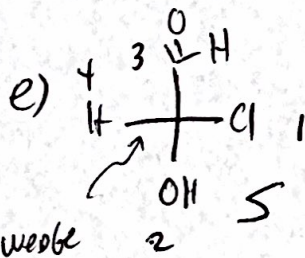
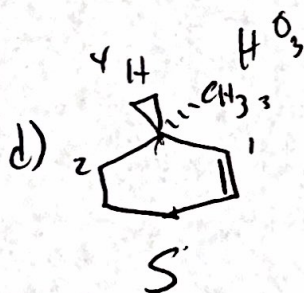
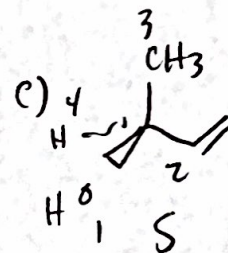
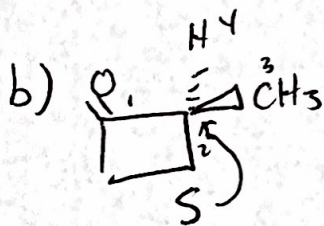
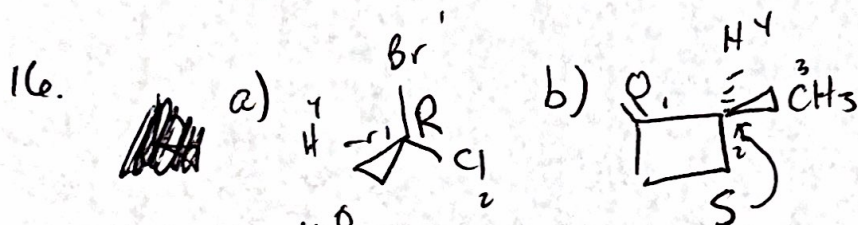
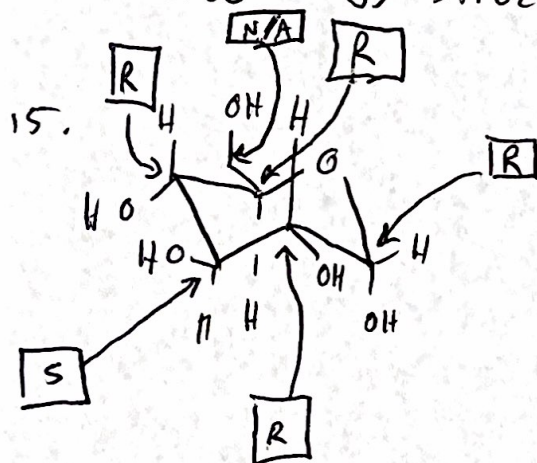


Chapter 7

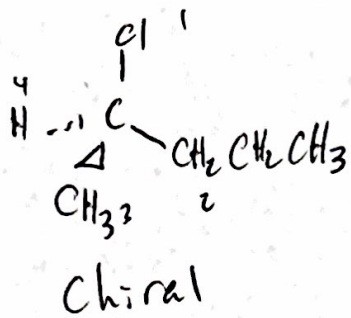
14. a) stereo b) identical c) structural d) stereo

e) ~~identical~~ f) conformers g) structural h) identical

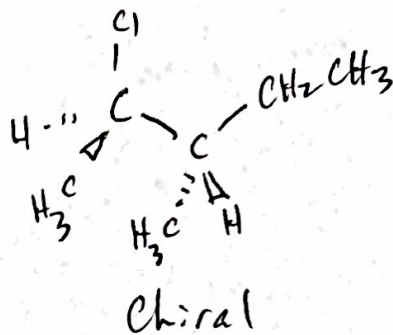
i) stereo j) structural



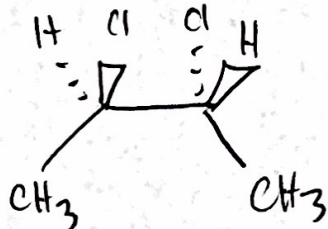
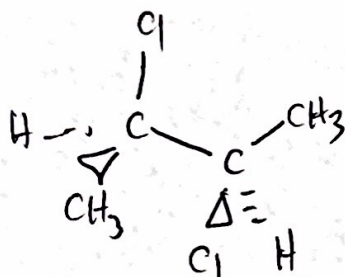
17. a)



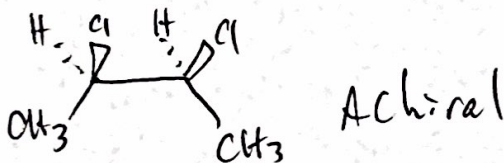
b)



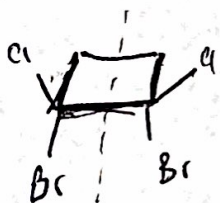
c)



d)

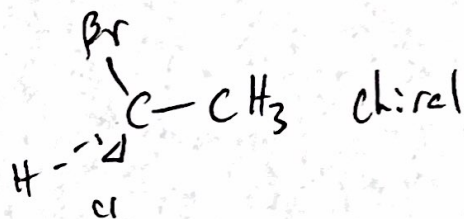


e)

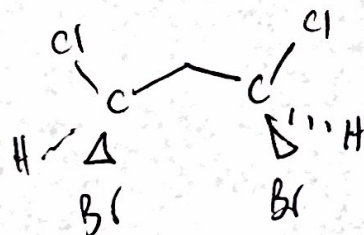


meso is achiral by def.

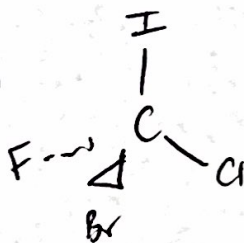
f)



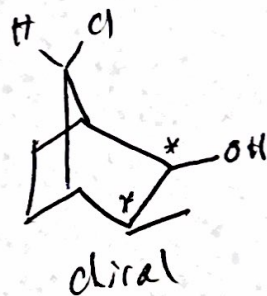
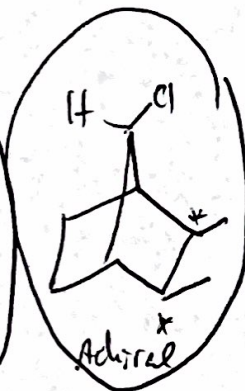
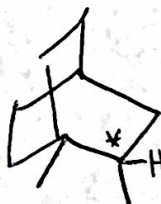
g)



h)



18.



19. a) Achiral b) Achiral c) Chiral d) Achiral e) Chiral

f) Achiral g) Chiral h) Achiral i) Chiral j) Chiral

k) Achiral l) Achiral m) Chiral n) Achiral o) Achiral

p) Achiral q) Achiral r) Chiral s) Chiral t) Achiral

u) Chiral v) Achiral w) Chiral x) Achiral y) Achiral

z) Chiral aa) Achiral bb) Achiral cc) Chiral dd) Achiral

ee) Chiral ff) Achiral gg) Achiral hh) Achiral ii) Chiral

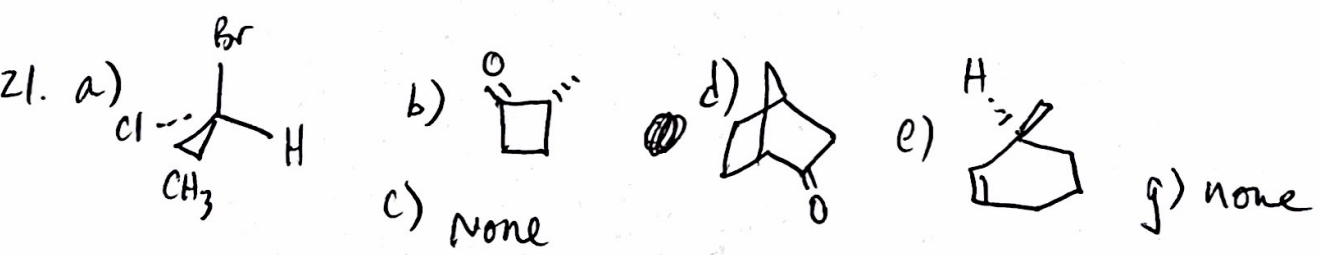
jj) Chiral kk) Chiral ll) Chiral mm) Chiral nn) Achiral

oo) Achiral pp) Chiral qq) Achiral (flat) rr) Achiral ss) Achiral

tt) Achiral uu) Achiral

c=c are delocalized

20. c) 98.5% S, 1.5% R = 97% ee.



22. a) -8.7° b) 50% ee. c) -4.35° d) (d) & (f) e) 20%, $+1.74^\circ$
 f) 0% Racemate or Racemic mixture g) $\frac{-6.96}{-8.7^\circ} = 80\% \text{ ee.}$

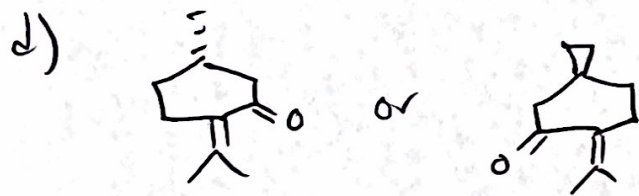
23. a) enantiomers b) same c) diastereomers d) enantiomers
 e) structural iso. f) diastereomers g) same h) enantiomers
 i) diastereomers j) enantiomers k) same l) same
 m) enantiomers n) enantiomers o) same p) structural q) structural

24. a) 1,1-dibromoethane b) R-1-bromo-1-chloroethane
 c) R-Z-bromobutane d) S-Z-bromobutane
 e) (2S, 3S)-Dibromobutane f) butane g) ZR-Bromobutane
 R-Z-bromobutane



- b) (+) - Rotates p.p. light to the right (dextrorotatory)

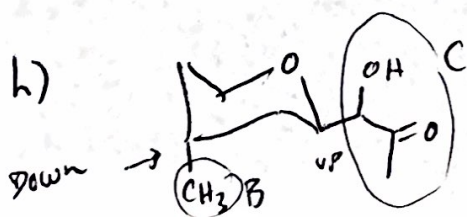
- c) No. ~~R~~ can be + or -, S can be + or -



only change one. IF you change both, you get the same thing.

- e) Z since it is an S.

- f) Equatorial g) trans (one wedge, one dash)



C is larger, but it is EQUATORIAL if TRANS...

B must be DOWN. IT IS AXIAL.