

1/2

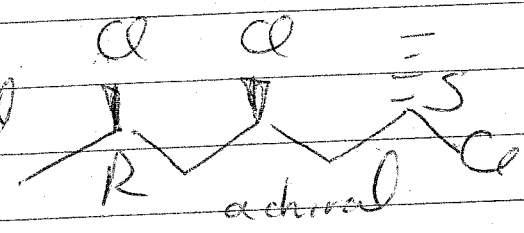
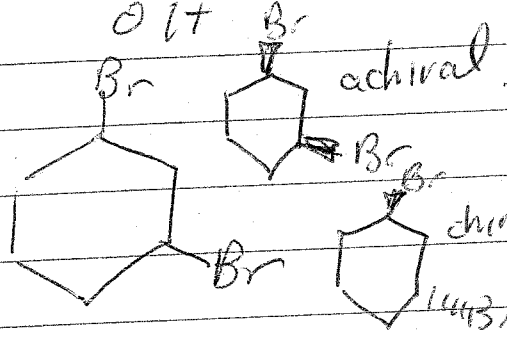
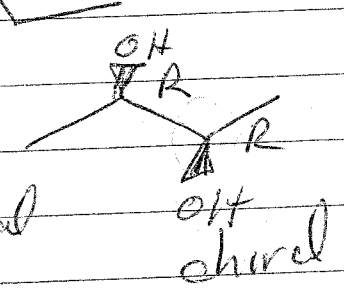
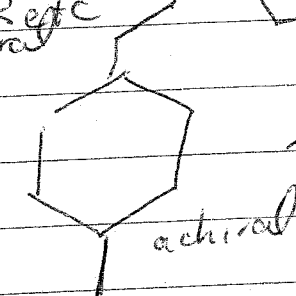
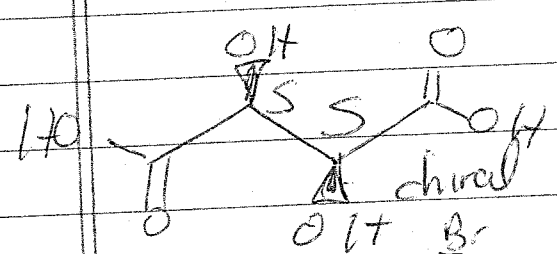
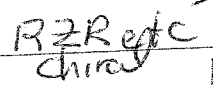
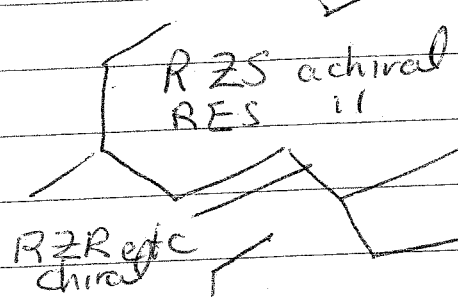
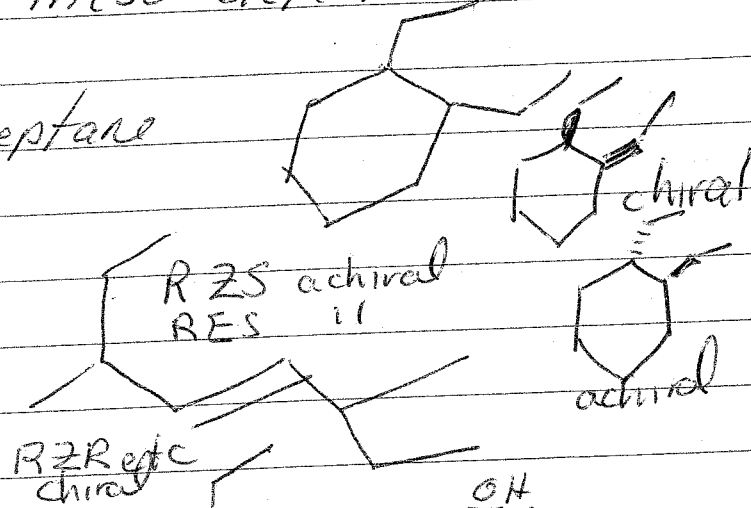
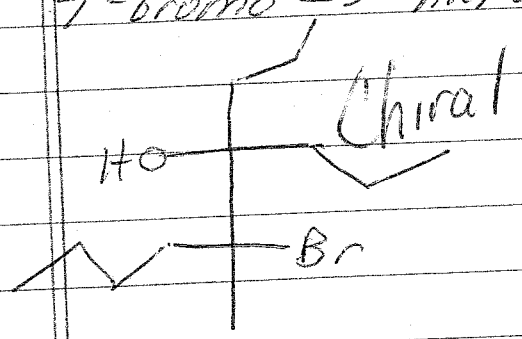
Note: Treat cyclohexane asymmetric carbons just like asymmetric carbons in linear molecules

FRIDAY Problems

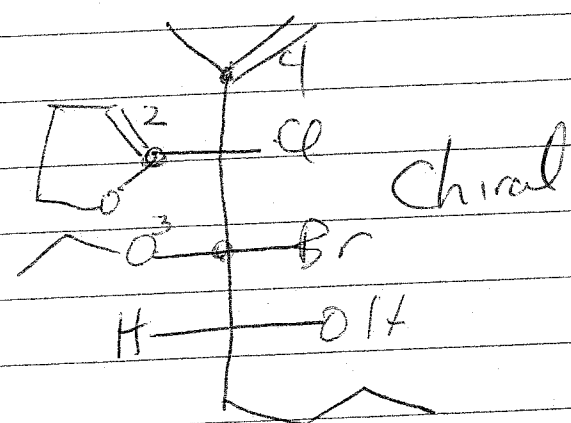
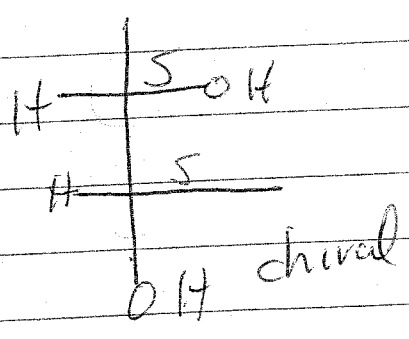
October 1, 2010

① Which of the following molecules are chiral? Be good meso detectives use assignment

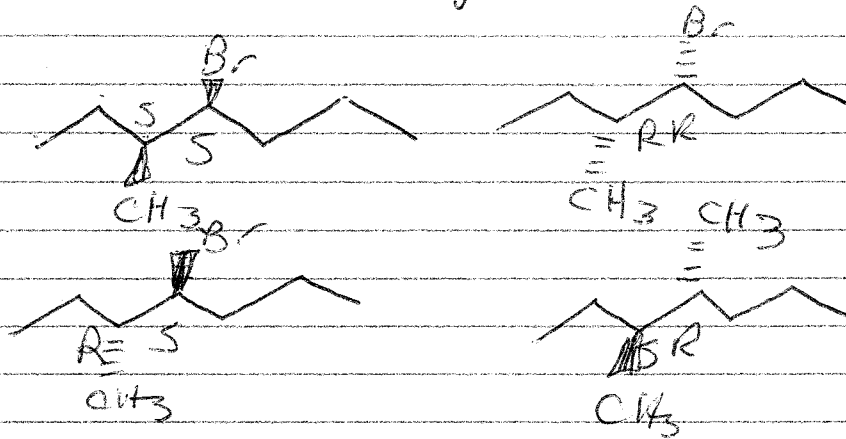
4-bromo-3-methylheptane ^{chiral}



1-800-550

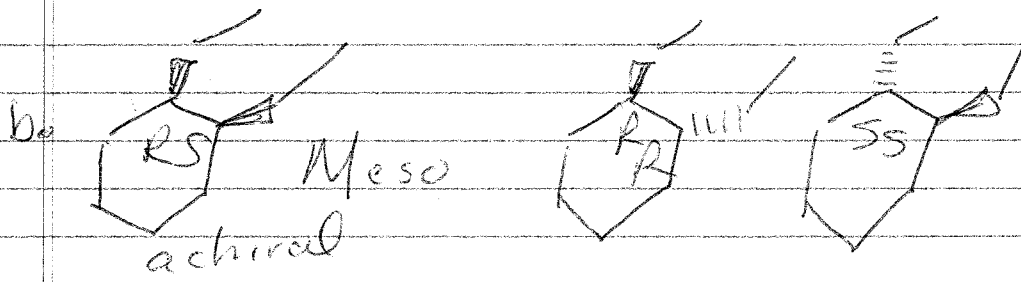


a. 4-bromo-3-methylheptane

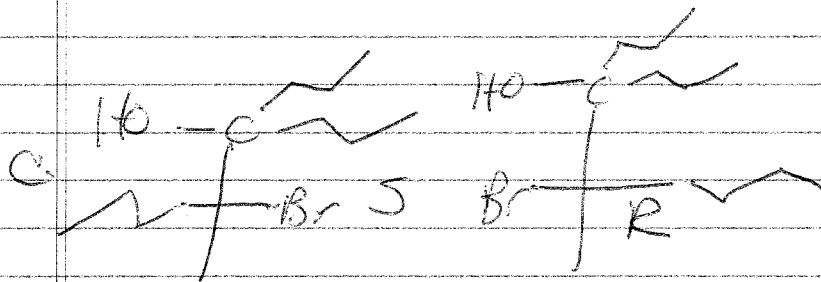


SS/RR
enantiomers
RS vs SR
enantiomers
SS vs RS
SS vs SR
RR vs RS
RR vs SR

enantiomers

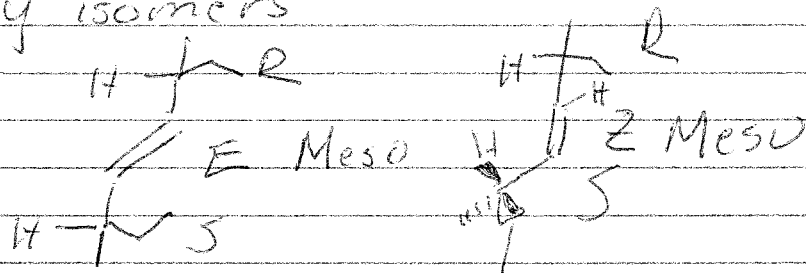


SS w RR
enantiomers
SS w RS
RR || RS
diastereomers



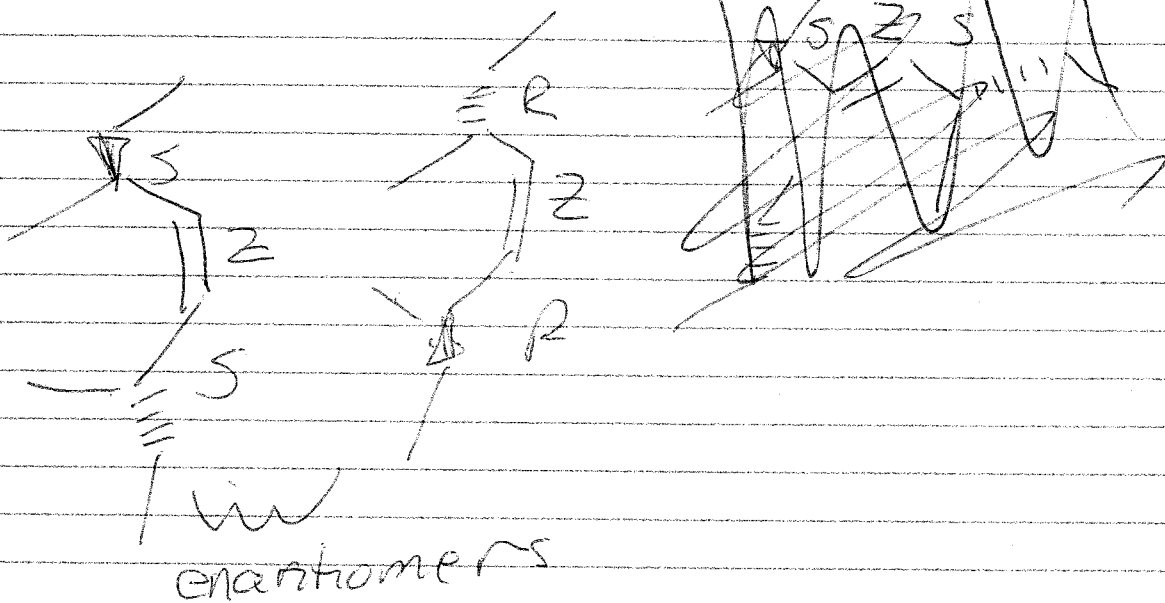
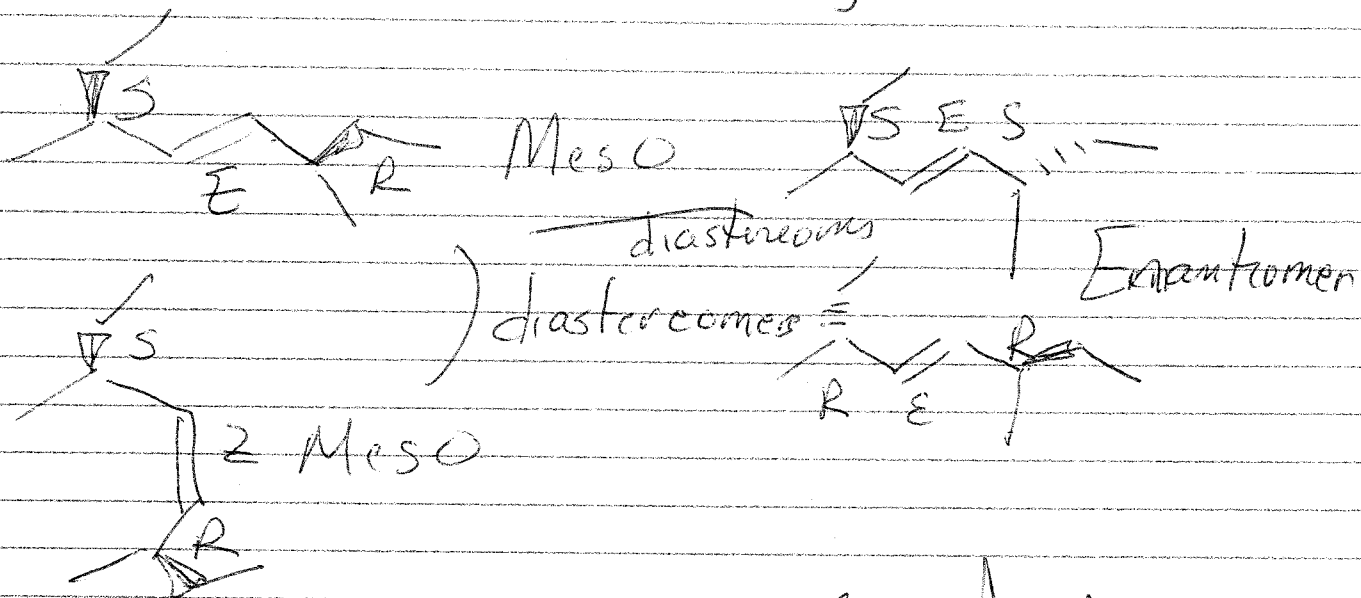
enantiomers

⊕ Many isomers



3

d. cont Drawn less awkwardly



SER w SZR diastereomers

~~SE~~ SER w SES

w RER

w SZS

w RZR

SZR w

SES

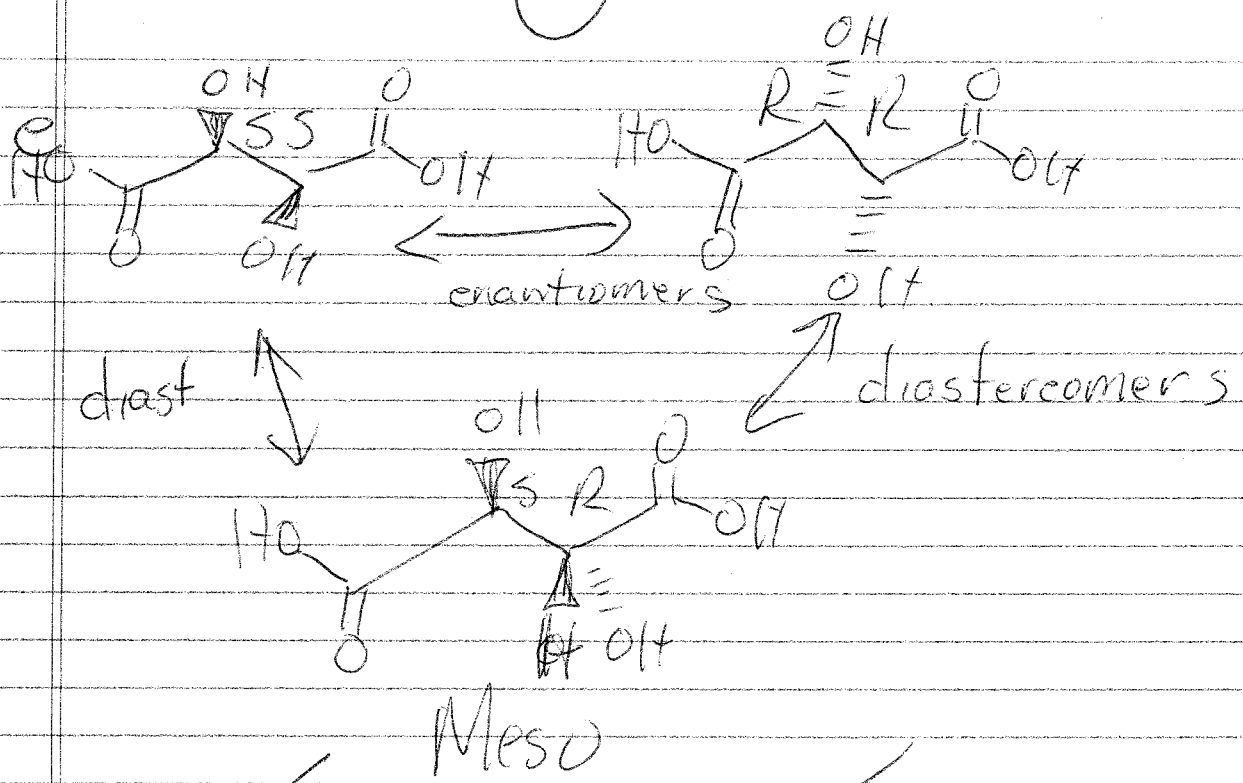
RER

SZS

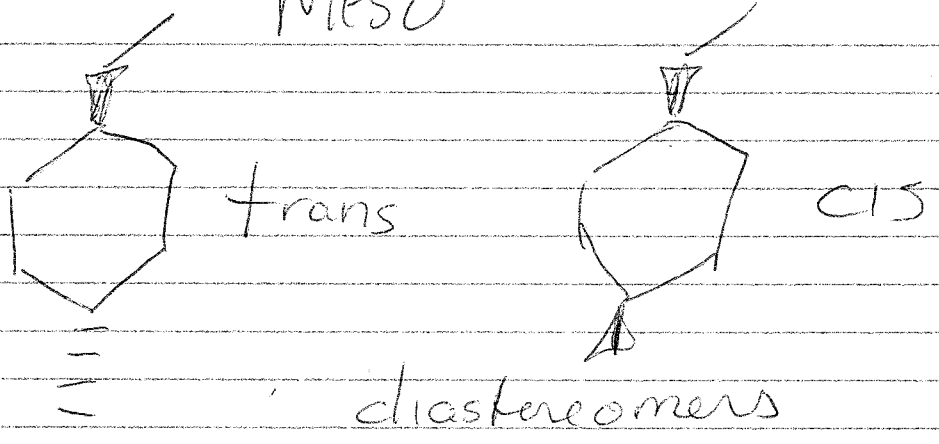
RZR

All other relationships - diastereomers

4

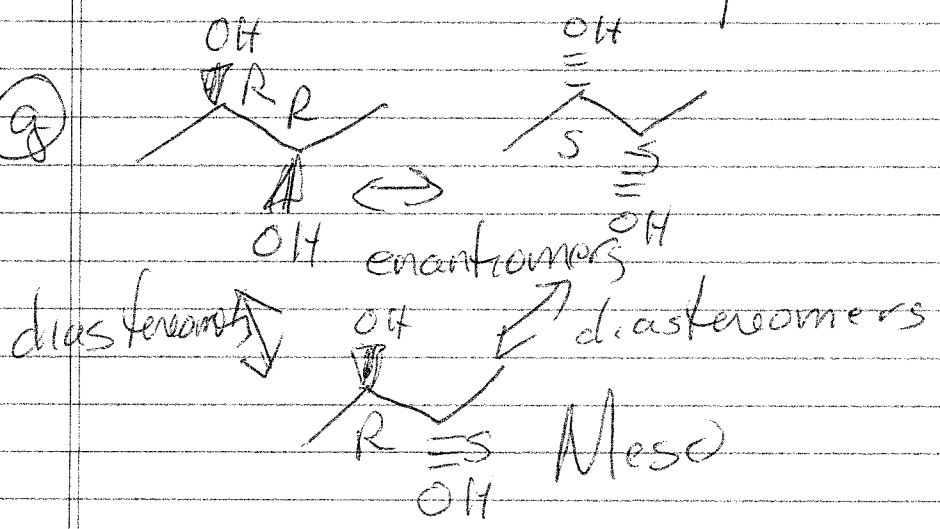


f

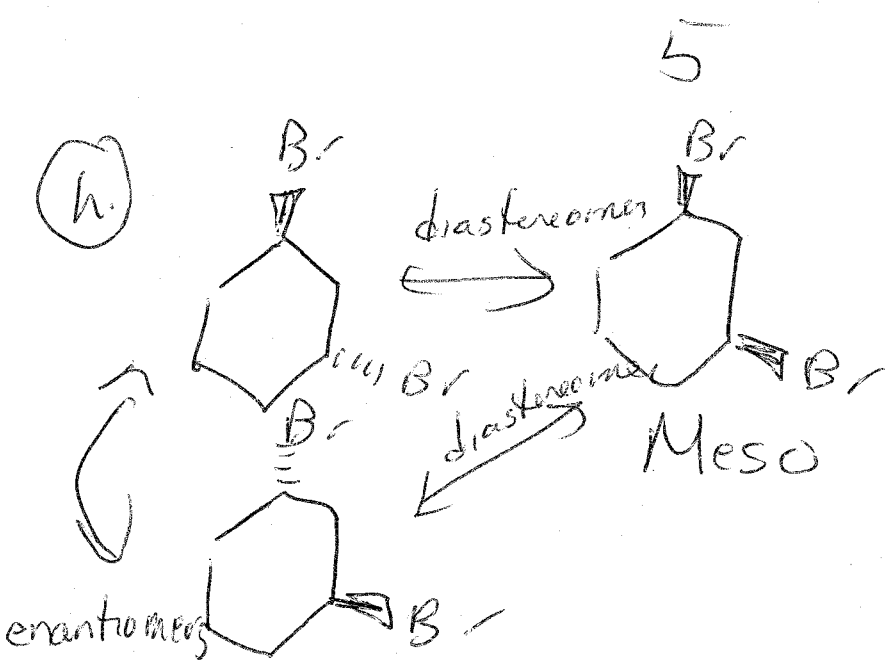


Neither has asymmetric C

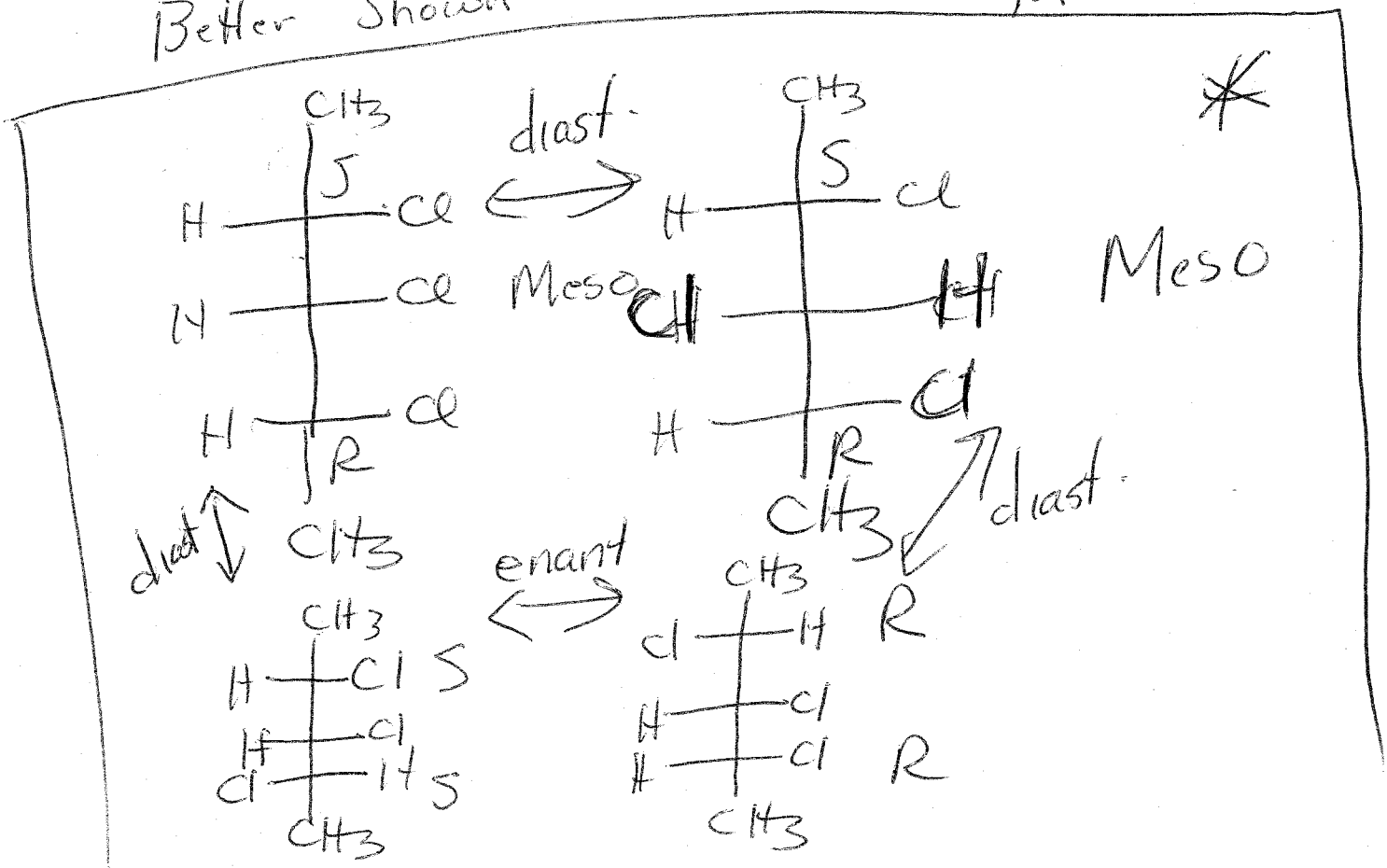
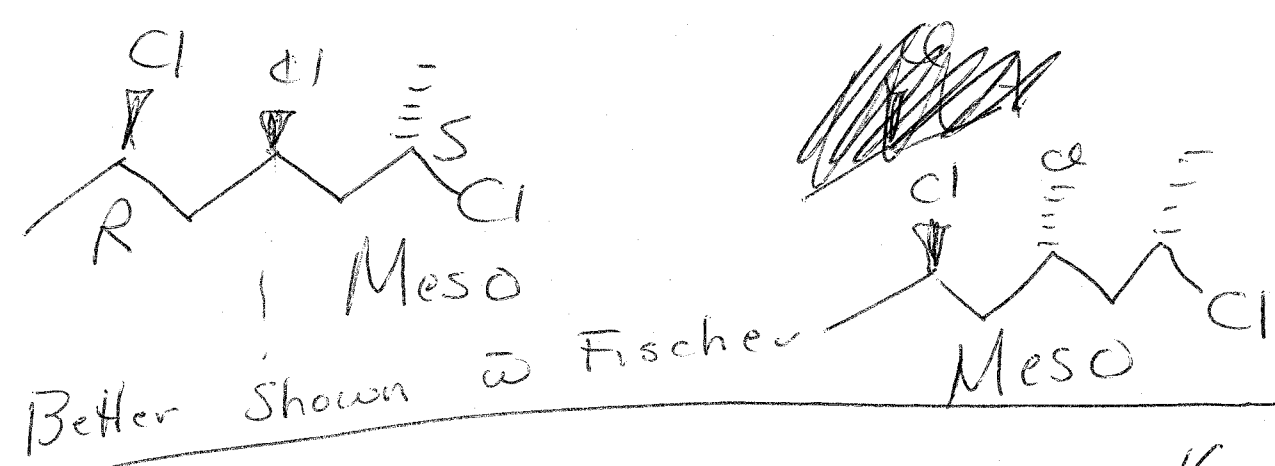
g



h.



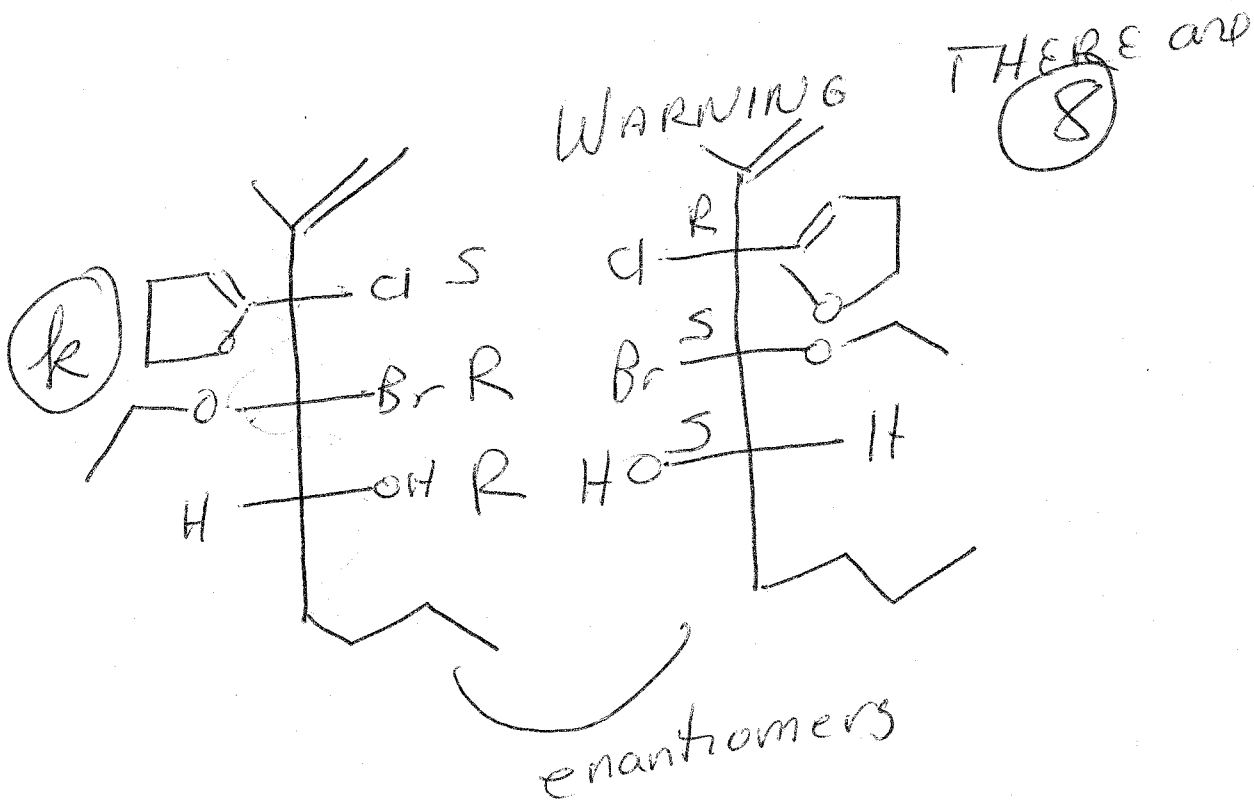
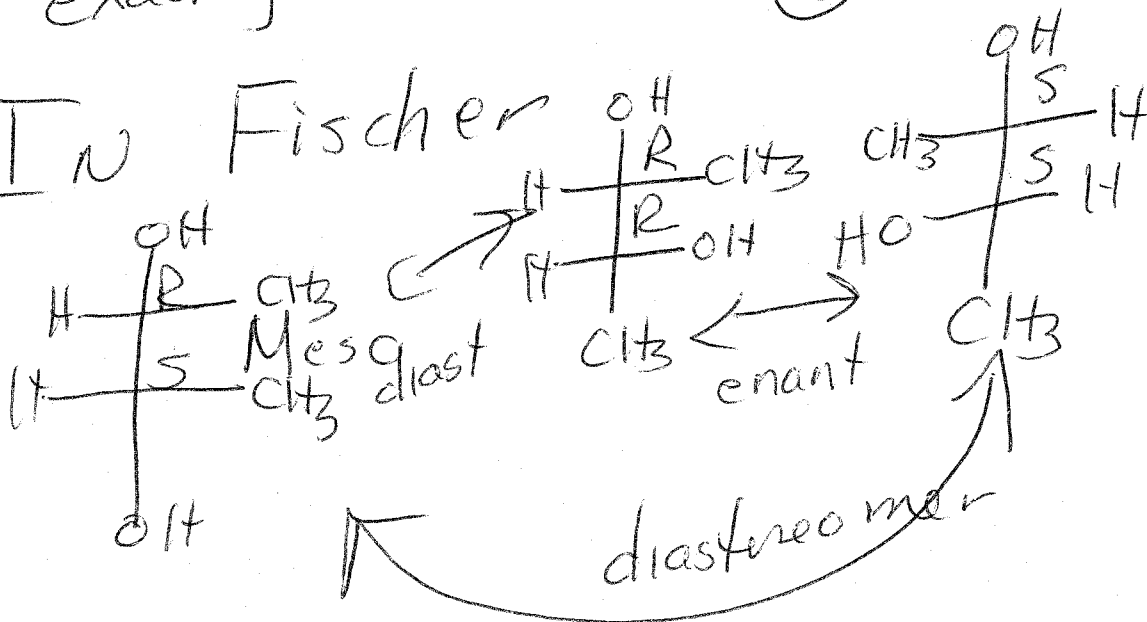
i.



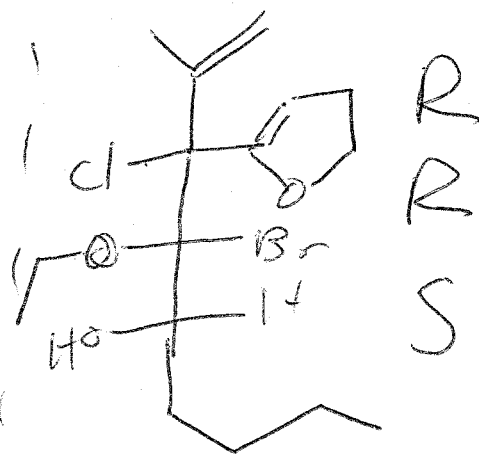
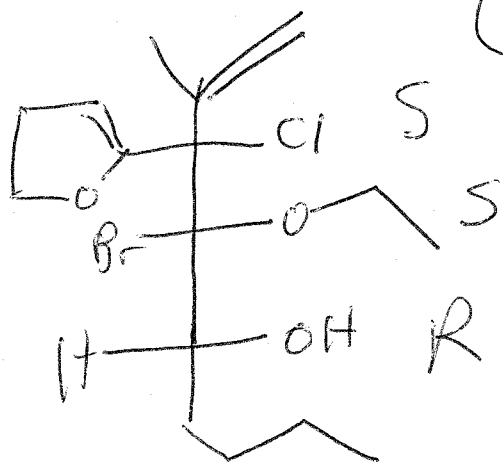
6.

(7) exactly same as (9)

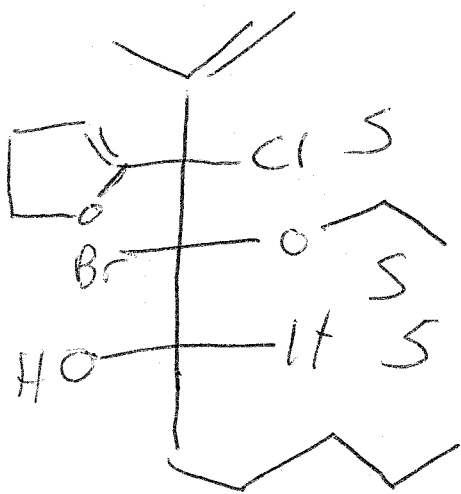
IN Fischer



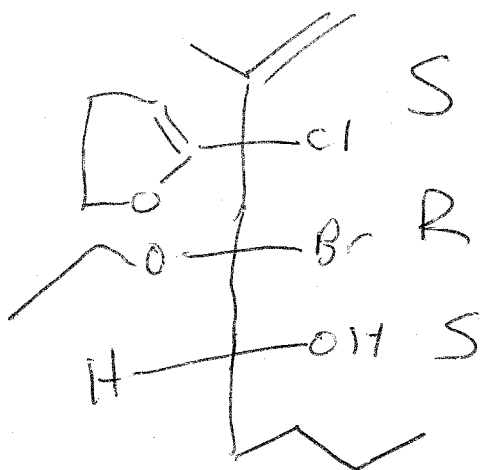
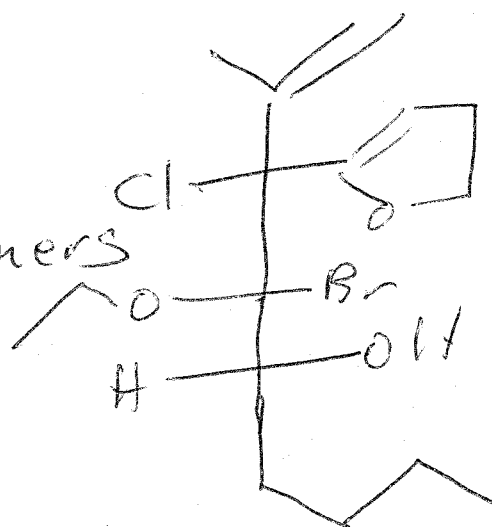
(7)



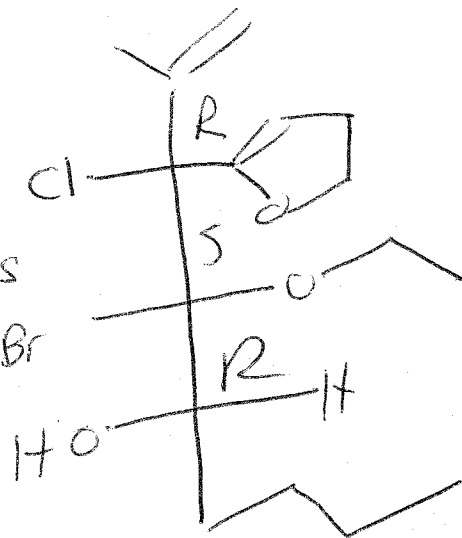
enantiomers



enantiomers



enantiomers



All other relationships
Diastereomeric