

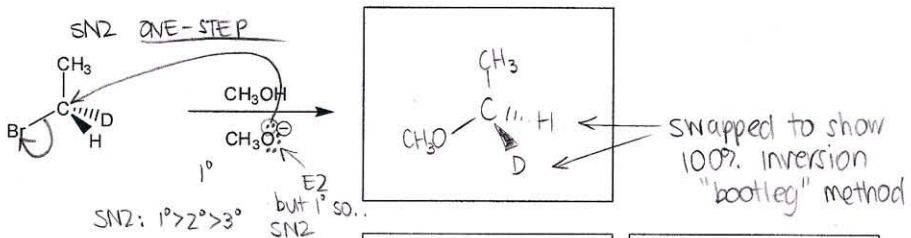
$S_N2: SH^-, RS^-, CN^-, I^-$   
 $E2: OH^-, RO^-, NH_2^-, R-C\equiv C^-$

**Chapter 6 Worksheet 1**

Give the products of the following reactions. Be sure to indicate the proper stereochemistry when appropriate.

SN2

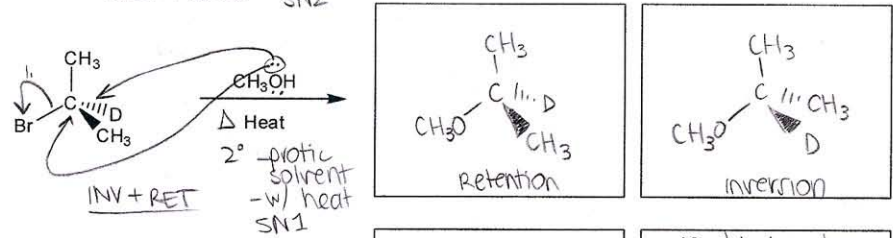
1.



SN1

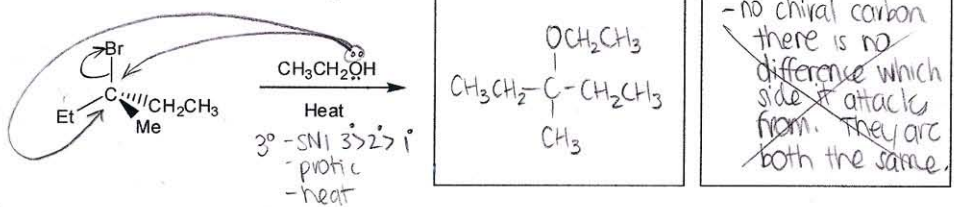
2.

TWO-STEP  
 1. LG LEAVES  
 2. NUC ATTACKS



SN1

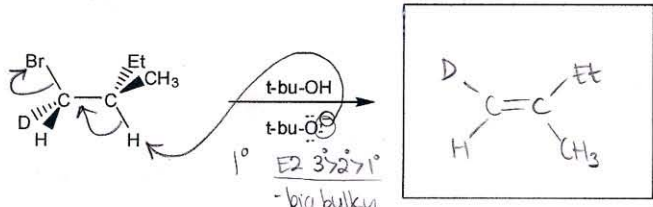
3.



E2

4.

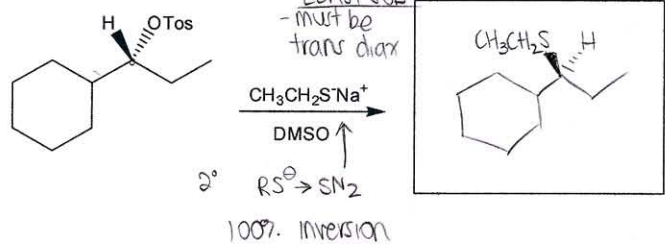
ONE-STEP



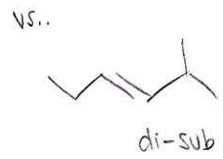
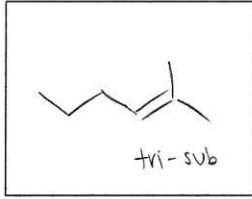
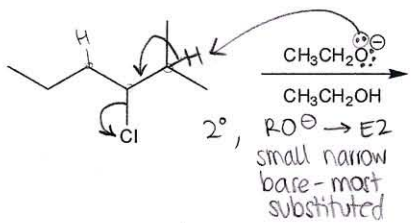
★ D and Et both on wedges so they must be on the same side.  
 Same for H and CH<sub>3</sub>.

SN2

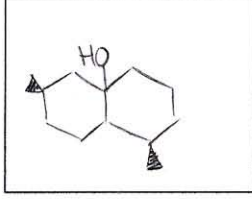
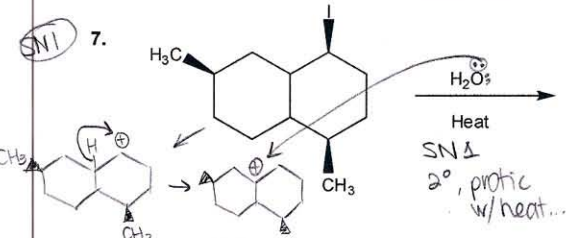
5.



E2

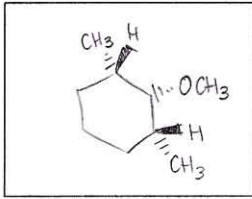
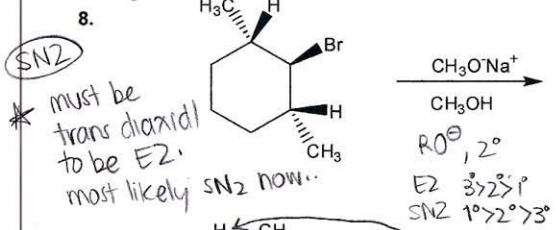


SN1

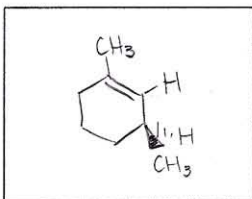
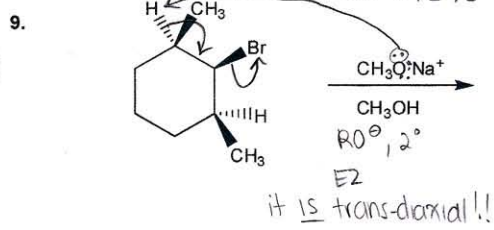


no visible stereochem. it could either be pointed up or down. build it if you dont believe me...

SN2

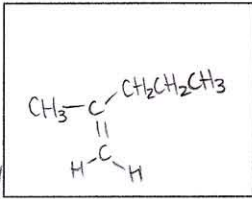
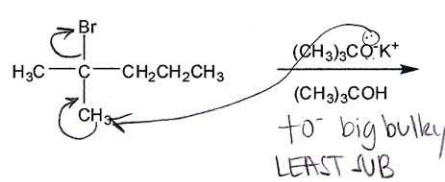


E2

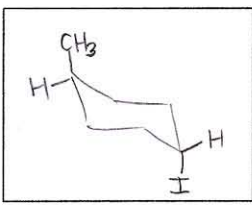
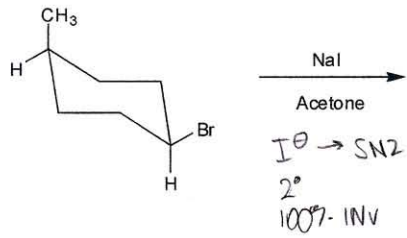


\* either H will do in this problem. silly me, i forgot to make one cis :-)

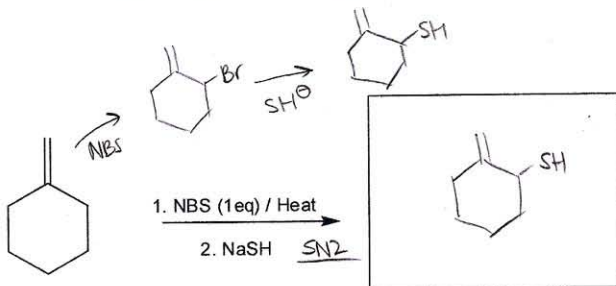
E2



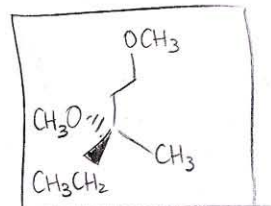
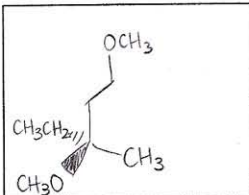
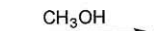
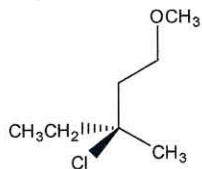
SN2



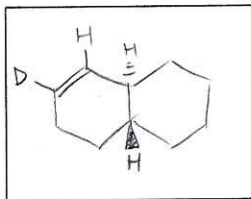
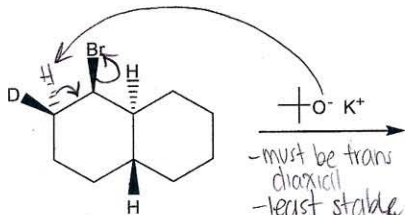
12.



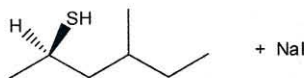
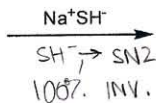
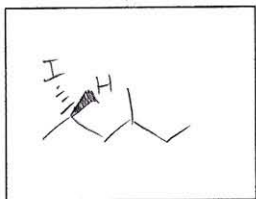
13.



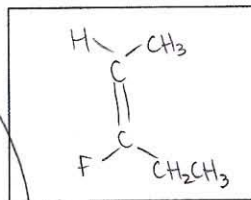
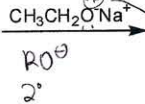
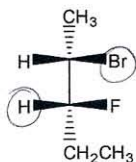
14.



15.

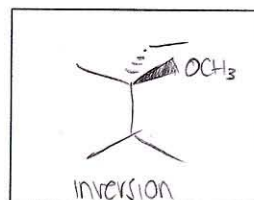
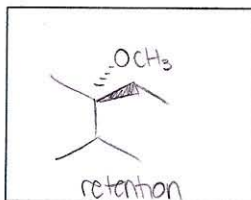
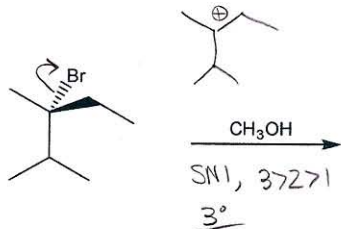


16.

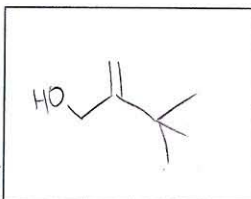
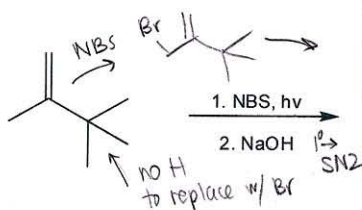


I rotated this to make it look trans-diaxial, I just pushed Br and H back a tiny bit until it was in the plane. All other wedges + dashes remain the same.

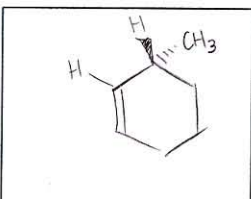
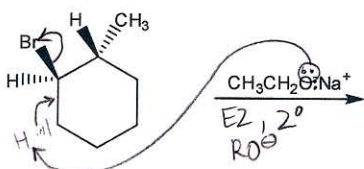
17.



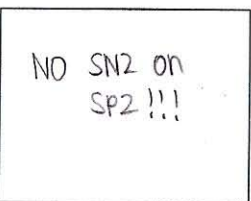
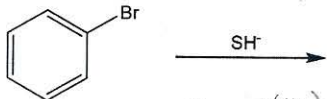
18.



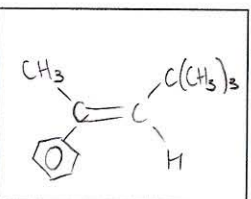
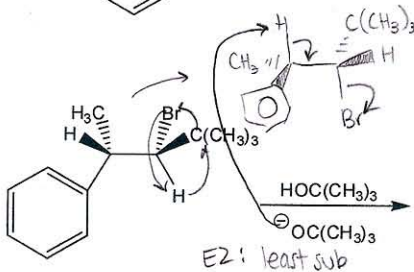
19.



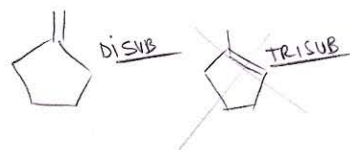
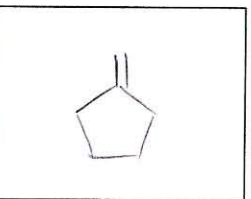
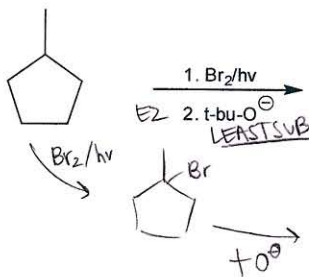
20.



21.

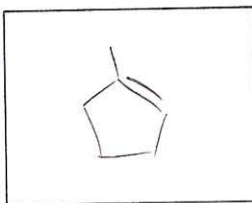
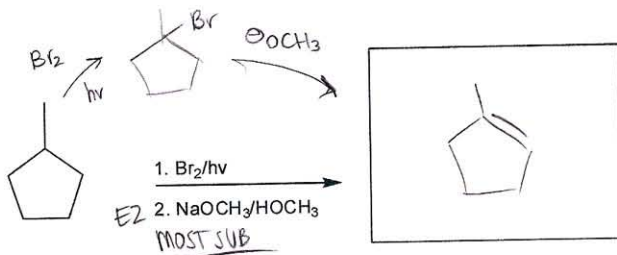


22.



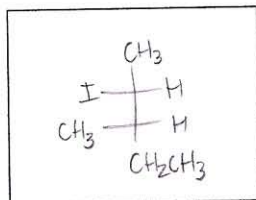
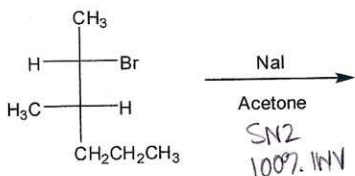
23.

E2



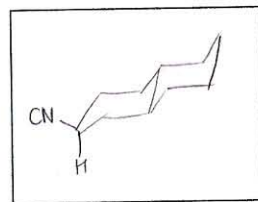
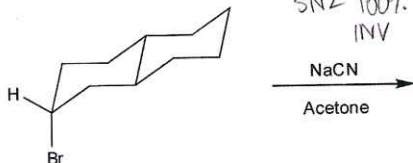
24.

SN2

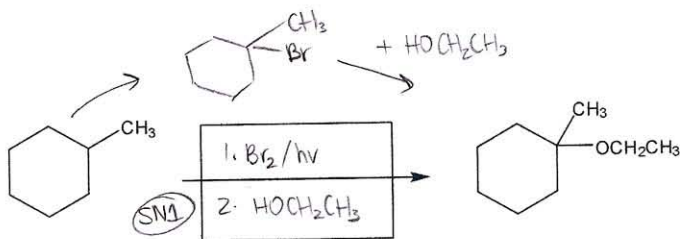


25.

SN2

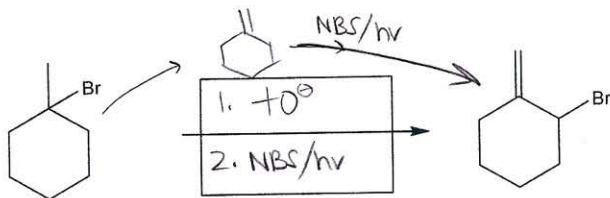


26.



\* Because no stereochem is given in the product, you do not need to be concerned about inversion + retention!

27.



28.

