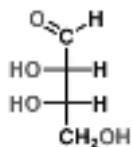
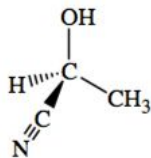
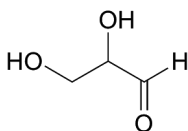
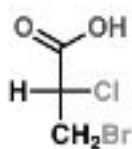


## Final Test Prep, Part 2

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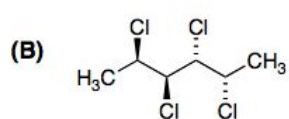
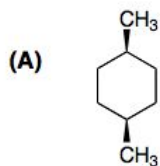
- 1) What are the four types of hydrocarbons and the ten types of functional groups that we have gone over?
- 2) What are enantiomers and diastereomers?
- 3) What is the term for a molecule that has chiral centers, but also an internal plane of symmetry?
- 4) Determine the R or S configuration of the following compounds, and name the last two.





5) If a solution of a compound (40.0g/100 mL of solution) has a measured rotation of  $+14^\circ$  in a 3.5 dm tube, the specific rotation is:

6) Which of the following represents a meso compound?



7) List all of the things you can think of that constitute an  $S_N2$  reaction?

8) List all of the things you can think of that constitute an  $S_N1$  reaction?

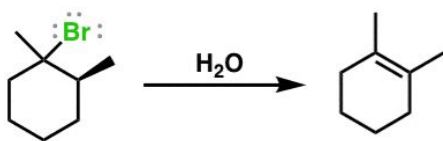
9) List all of the things you can think of that constitute an E2 reaction?

10) List all of the things you can think of that constitute an E1 reaction?

11) Provide the mechanism for the following reaction.



12) Provide the mechanism for the following reaction.



- 13) We went over more than 20 reactions in chapter 8, list as many as you can, and describe what happens in them. Also, provide the reagents for the reactions.