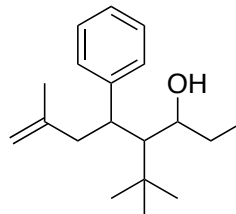
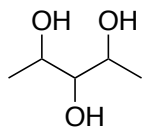
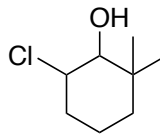
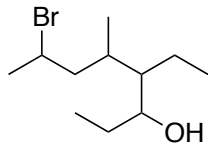
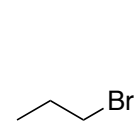
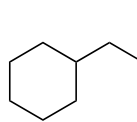
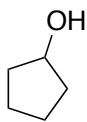
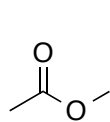
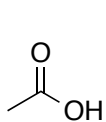


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Chapter 17 Problem Set

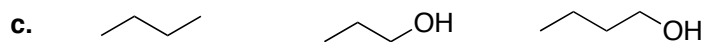
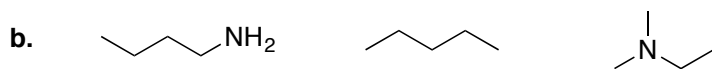
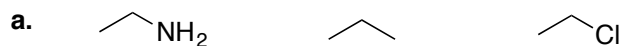
1. Determine the IUPAC name for each alcohol-containing compound shown below.

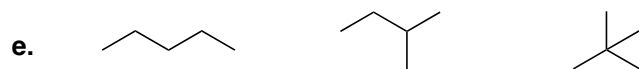
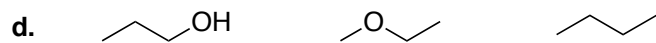


2. For each compound below, list the type(s) of intermolecular forces that are present. Hydrogen Bonding (HB); Dipole-Dipole Interactions (DD); van der Waals Interactions (VDW)

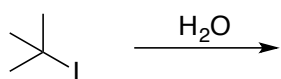
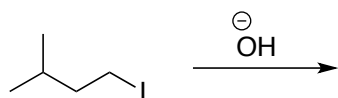
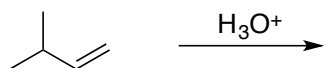
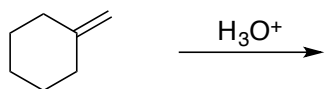


3. For each series of compounds below, rank the compounds in order of increasing boiling point. Label the compound with the highest bp as "1" and the lowest bp as "3."

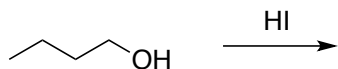
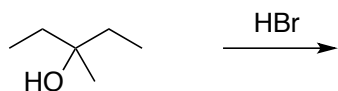




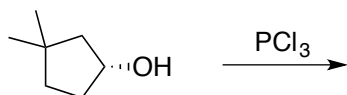
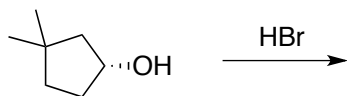
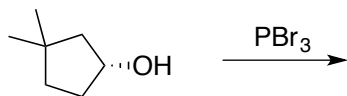
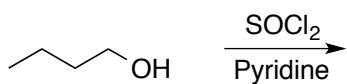
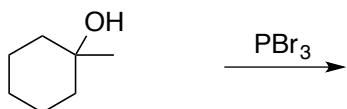
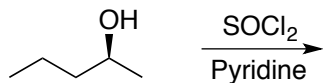
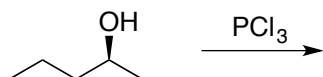
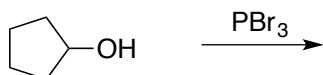
4. Write the major organic product and the complete reaction mechanism for each reaction shown below.



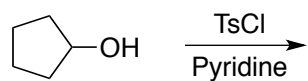
5. Draw the major organic product for the reaction of each alcohol below with the given acid.



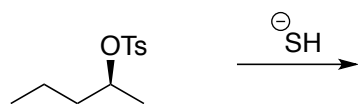
6. Predict the major organic product for each reaction below. If the reaction does not proceed under the specified conditions, write No Reaction.



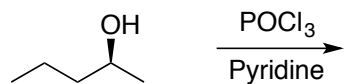
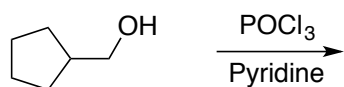
7. Predict the products and show the mechanism for the reaction below.



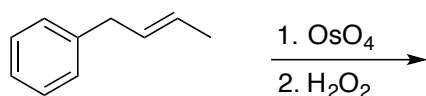
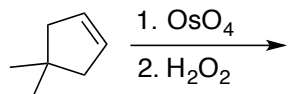
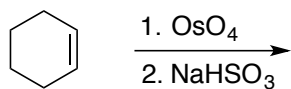
8. Predict the product for the reaction of each alkyl tosylate below.



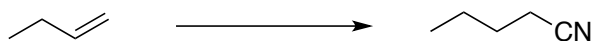
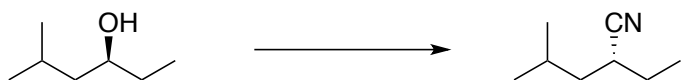
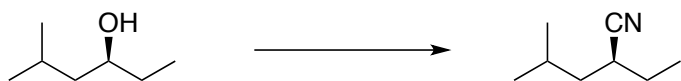
9. Predict the major organic product for each dehydration reaction shown below.



10. Predict the product for each of the reactions below.



11. Provide the necessary reagents to accomplish the following transformations.



12. Explain the different products that you get by varying the reaction conditions below.

