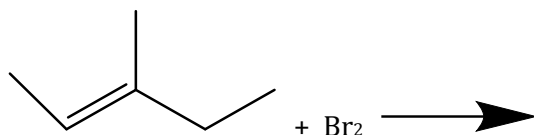


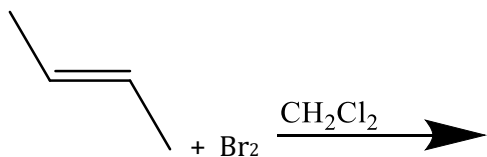
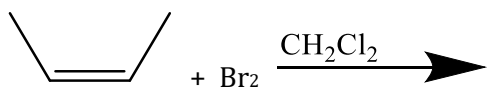
PALOT
Organic Chemistry I - Townsend
Problem Set #5
Fall 2017

1. A. What is the product of the reaction below?

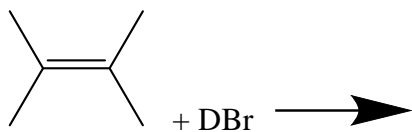
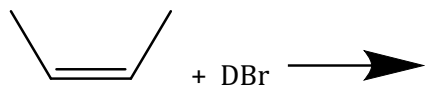


- B. What is the intermediate of this reaction?

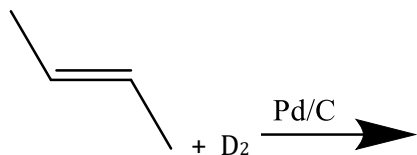
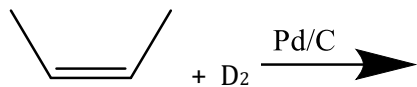
2. A. Draw the major stereochemical isomer of the products of the following reactions and label them as threo or erythro.



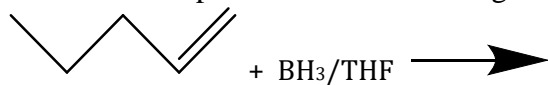
3. A. Draw the major stereochemical isomers of the products of the following reactions.



4. A. Draw the constitutional and stereochemical isomers of the products of the following reactions



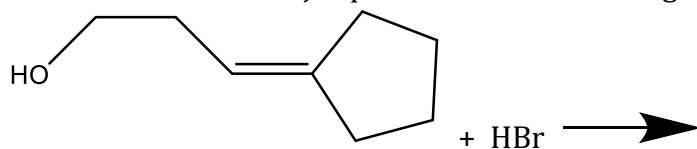
5. A. What is the product of the following reaction?



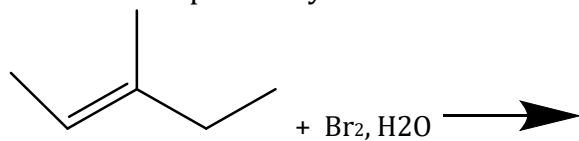
B. Using any reagent, synthesize an alcohol from the product above

C. How would the product differ if the same starting material was reacted with water in the presence of a strong acid? Explain why using the mechanisms of both reactions

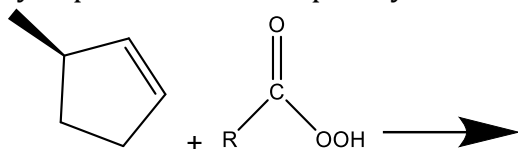
6. What is the major product of the following reaction?



7. What are the products of the following reaction and which will be most abundant? Explain why

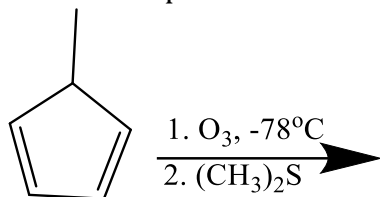


8. A. What is the product of the following reaction between a 3-methylcyclopent-1-ene and a peroxyacid?



- B. Draw all the stereoisomers of possible products and indicate which would be major.

9. What is the product of the following reaction?



PILOT Learning – Tip of the Week

Forgot your headphones? Phone charger? Not a problem!
Did you know you can borrow headphones and chargers for your phone and computer
at the MSE (library) main desk??