

# Chapter 6 Advanced Practice

answer key  
available on  
his website  
CHM 235  
Dr. Minger

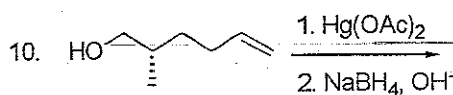
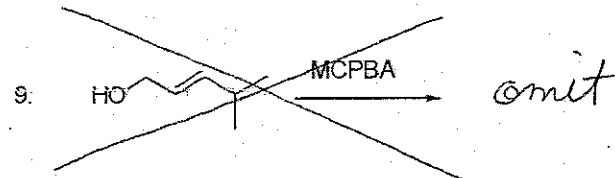
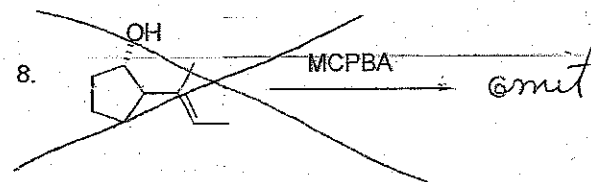
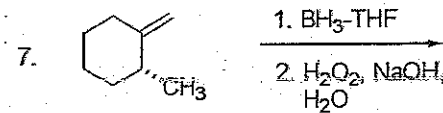
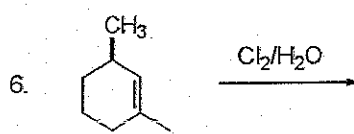
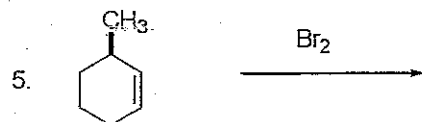
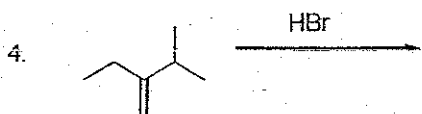
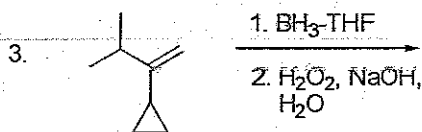
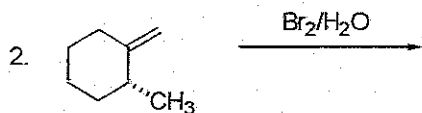
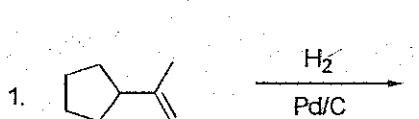
## Practice problems: Stereochemical outcomes of organic reactions

- For each of the following reaction conditions, draw the organic products, showing stereochemistry.  
→ Indicate the stereochemical relationship of the products (enantiomers or diastereomers). Then indicate whether the two products would be formed in equal amounts or unequal amounts.

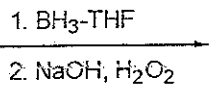
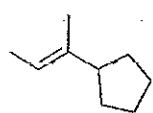
Keep in mind the following:

Optically inactive starting materials can only give optically inactive products, whether the product is a single achiral molecule or a racemic mixture of enantiomers.

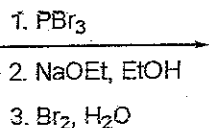
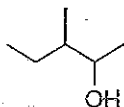
Optical activity in either the starting material or a catalyst/reagent will result in optical activity in the product, generally meaning an excess of one enantiomer or diastereomer over the other possible stereoisomeric products.



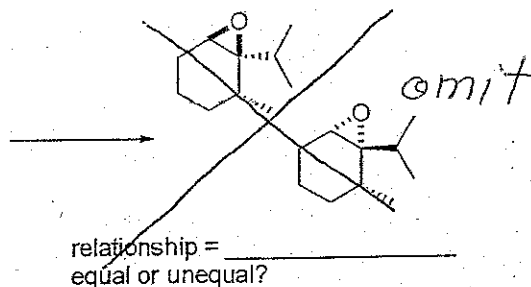
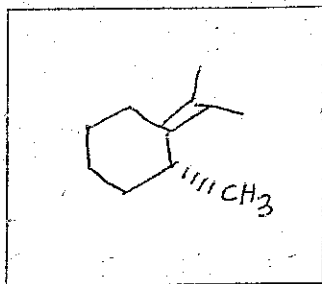
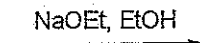
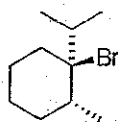
For each of the following reactions or reaction sequences, provide the missing starting material, major organic product, or reagents. For reactions where more than one stereoisomer can form, draw them all, indicate their relationships to each other, and state whether they are formed in equal or unequal amounts.



please answer

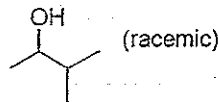
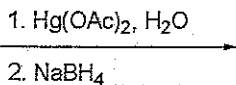


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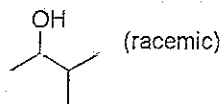
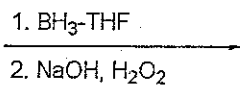


please answer

please answer



please answer



give the starting material

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## key

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### Practice problems: Stereochemical outcomes of organic reactions

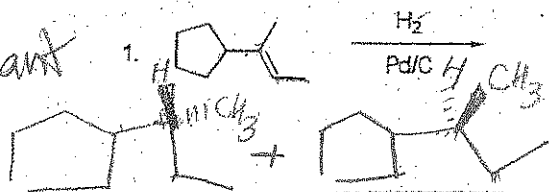
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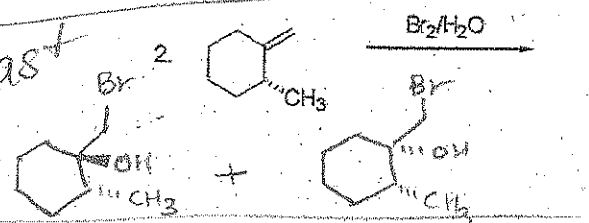
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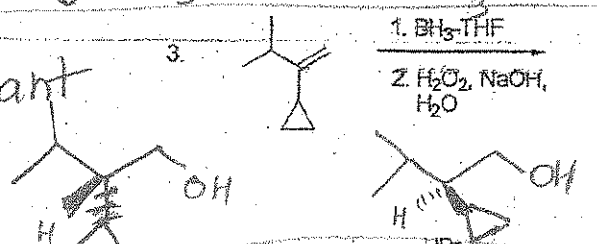
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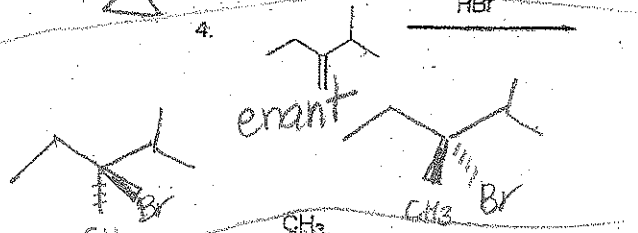
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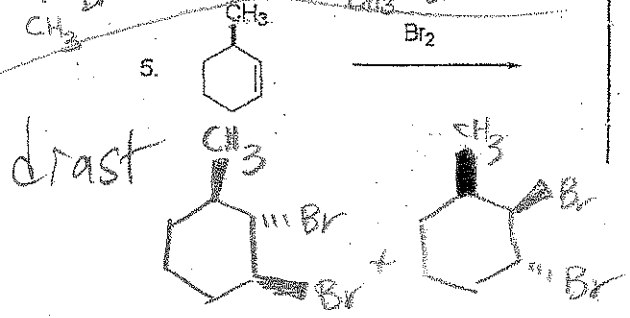


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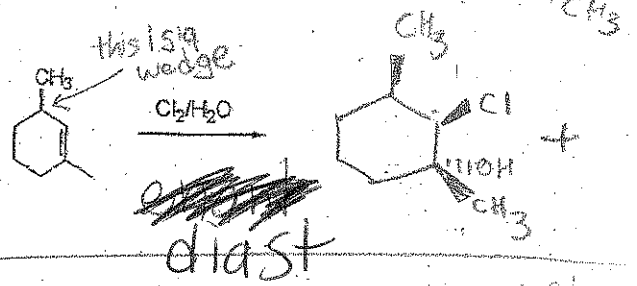
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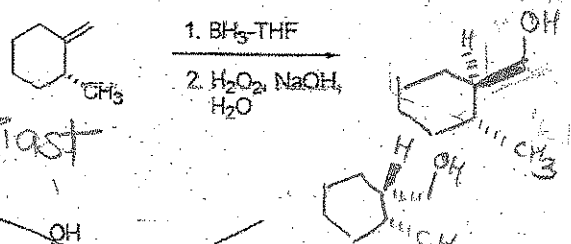
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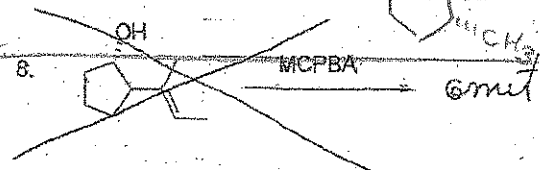
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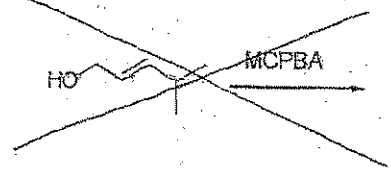
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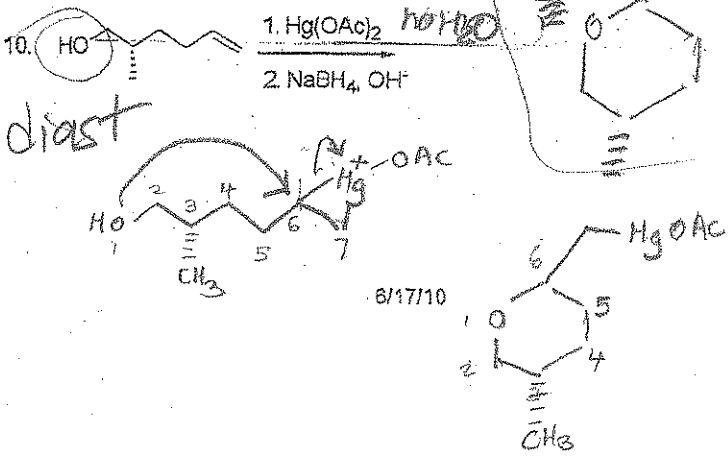


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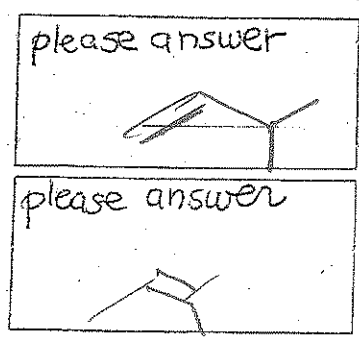
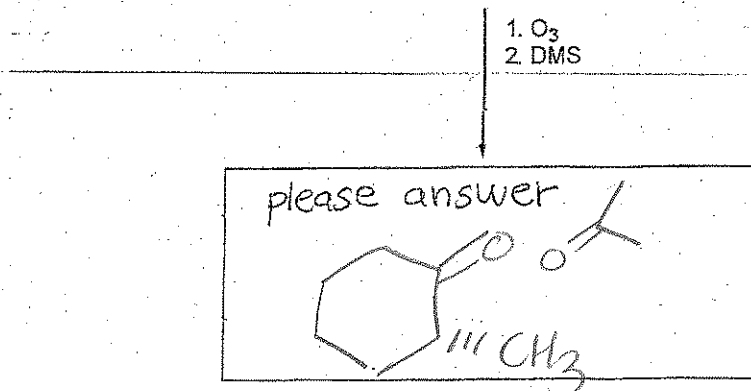
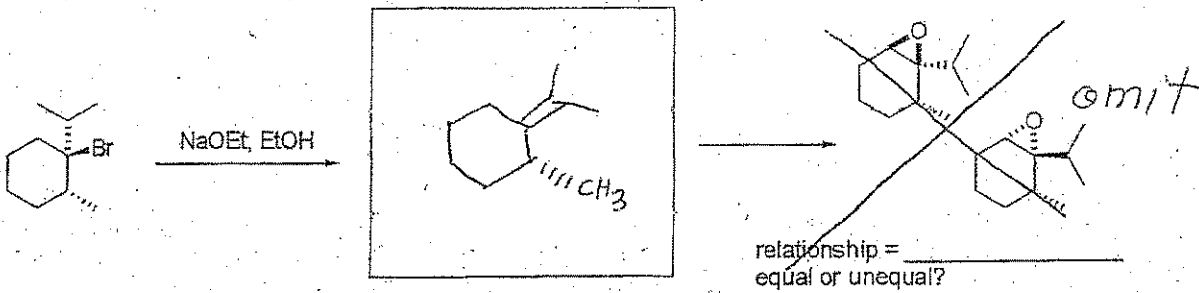
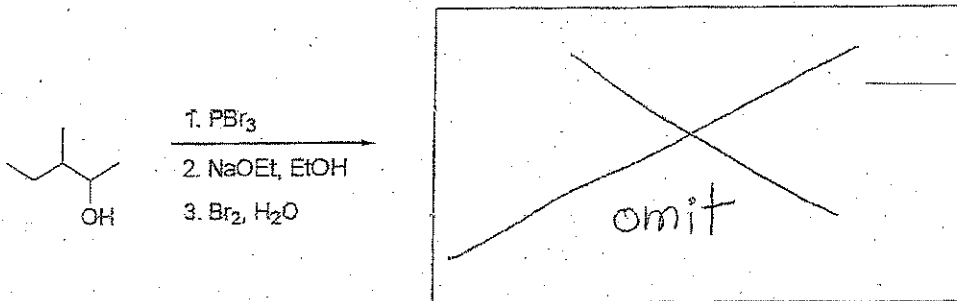
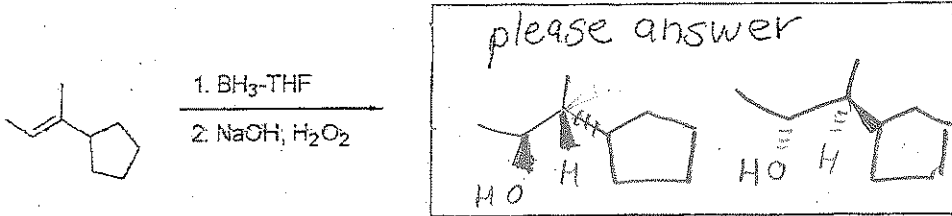
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give the starting material