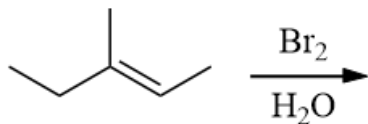


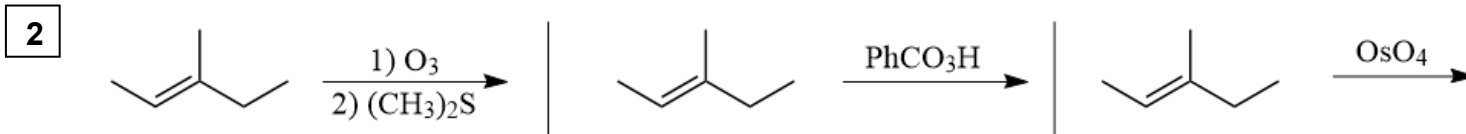
**1 Chapter 8 Alkene Reactions - Part 2**

Predict the major product.

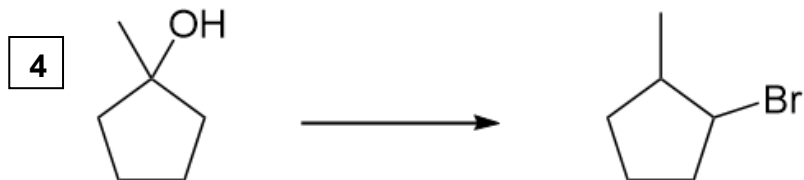


Mechanism:

Predict the major products for the following reactions.



Which reagents would be best to achieve the following synthesis?

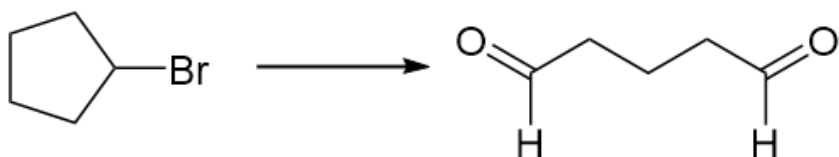


Which reagents would be best to achieve the following synthesis?

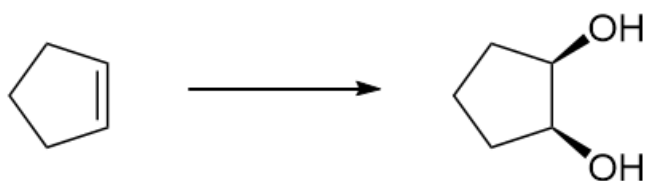
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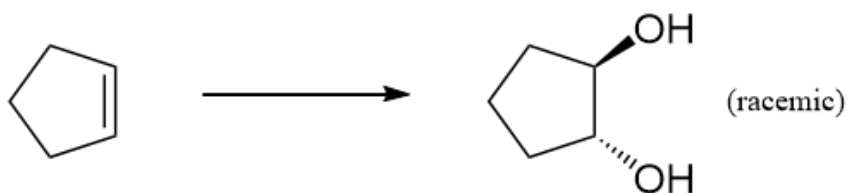
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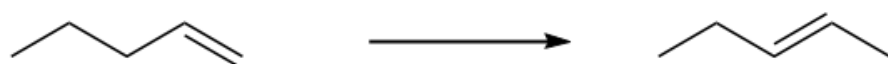
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8

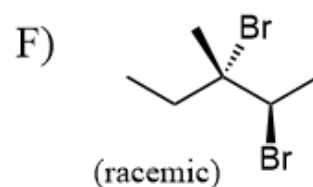
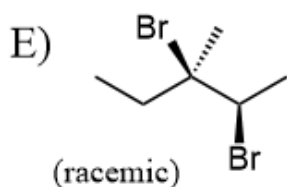
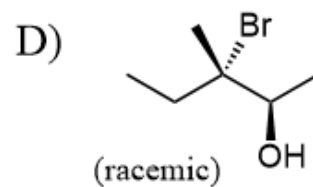
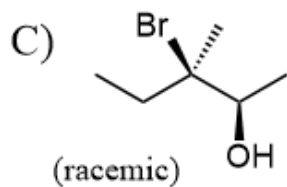
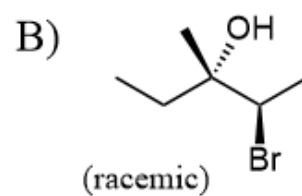
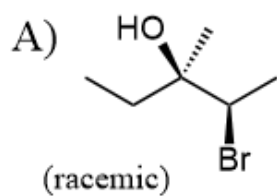
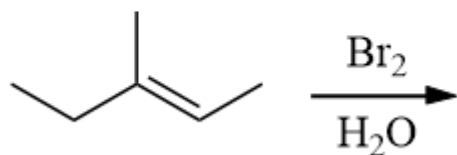


9



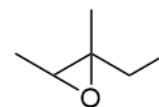
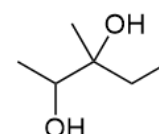
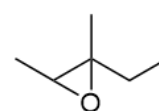
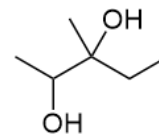
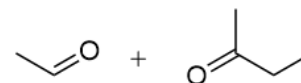
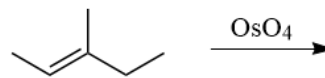
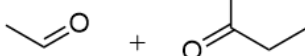
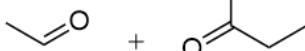
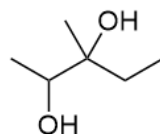
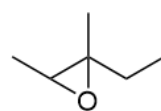
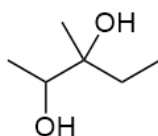
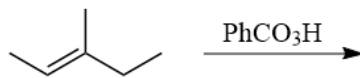
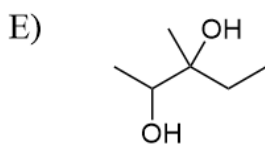
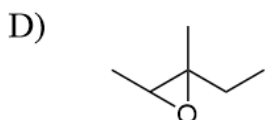
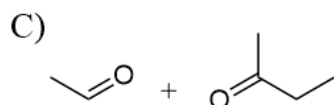
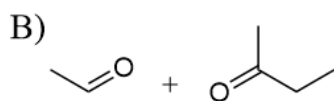
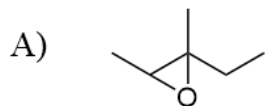
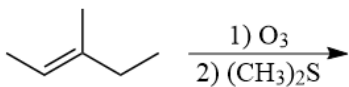
1

Predict the major product.



2

Predict the major products for the following reactions.



Which reagents would be best to achieve the following synthesis?

3



A) 1) HBr, ROOR  
2) *t*-BuOK

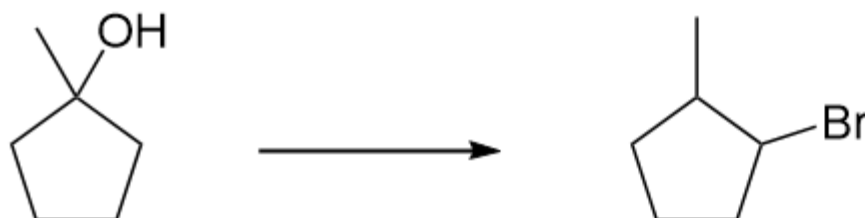
C) 1) HBr  
2) *t*-BuOK

B) 1) HBr, ROOR  
2) NaOEt

D) 1) HBr  
2) NaOEt

Which reagents would be best to achieve the following synthesis?

4



A) 1) TsCl, py  
2) *t*-BuOK  
3) HBr

C) 1) TsCl, py  
2) *t*-BuOK  
3) HBr, ROOR

B) 1) conc. H<sub>2</sub>SO<sub>4</sub>, heat  
2) HBr, ROOR

D) 1) conc. H<sub>2</sub>SO<sub>4</sub>, heat  
2) HBr

Which reagents would be best to achieve the following synthesis?

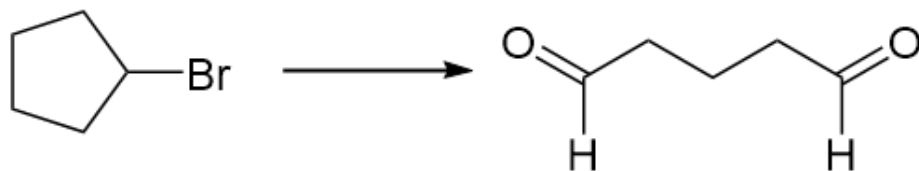
5



- A) 1) *t*-BuOK  
2) Br<sub>2</sub>, H<sub>2</sub>O  
3) NaH
- B) 1) H<sub>2</sub>SO<sub>4</sub>, heat  
2) Br<sub>2</sub>, H<sub>2</sub>O  
3) NaH
- C) 1) TsCl, py  
2) *t*-BuOK  
3) MCPBA
- D) 1) *t*-BuOK  
2) RCO<sub>3</sub>H
- E) 1) H<sub>2</sub>SO<sub>4</sub>, heat  
2) MCPBA

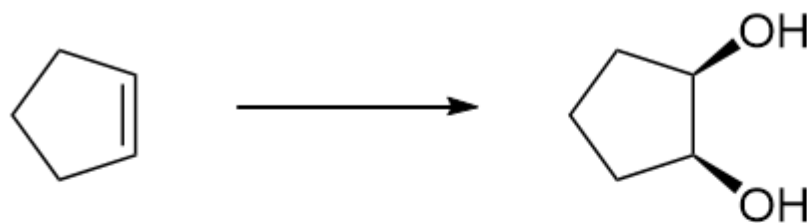
Which reagents would be best to achieve the following synthesis?

6



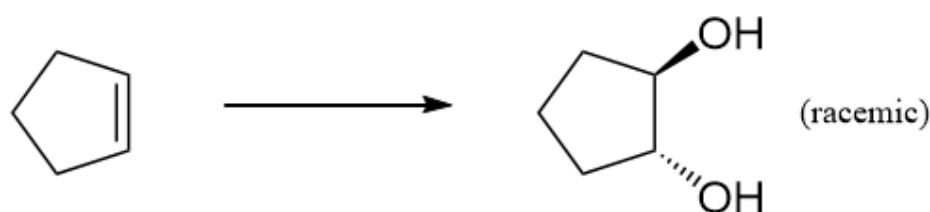
- A) 1) conc. H<sub>2</sub>SO<sub>4</sub>  
2) BH<sub>3</sub>-THF  
3) H<sub>2</sub>O<sub>2</sub>, NaOH
- B) 1) *t*-BuOK  
2) O<sub>3</sub>  
3) Zn, H<sub>2</sub>O
- C) 1) *t*-BuOK  
2) RCO<sub>3</sub>H  
3) H<sub>3</sub>O<sup>+</sup>
- D) 1) *t*-BuOK  
2) RCO<sub>3</sub>H

7 Which reagent(s) would be best to achieve the following synthesis?



- A) 1)  $\text{KMnO}_4$   
2)  $\text{H}_3\text{O}^+$
- B)  $\text{KMnO}_4$
- C) mCPBA
- D) 1)  $\text{O}_3$   
2) DMS
- E) 1) mCPBA  
2)  $\text{H}_3\text{O}^+$

8 Which reagent(s) would be best to achieve the following synthesis?



- A) 1)  $\text{KMnO}_4$   
2)  $\text{H}_3\text{O}^+$
- B)  $\text{KMnO}_4$
- C) 1)  $\text{KMnO}_4$   
2)  $\text{TsCl}$ , py  
3)  $\text{NaOH}$ ,  
 $\text{H}_2\text{O}$
- D) 1)  $\text{O}_3$   
2) DMS
- E) 1) mCPBA  
2)  $\text{H}_3\text{O}^+$

Which reagents would be best to achieve the following synthesis?



A) 1) HBr, ROOR  
2) *t*-BuOK

C) 1) HBr  
2) *t*-BuOK

B) 1) HBr, ROOR  
2) NaOEt

D) 1) HBr  
2) NaOEt