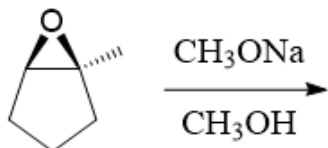


CHM 3150 Organic Chemistry II  
Dr. Laurie S. Starkey, Cal Poly Pomona  
Chapter 13 Ethers & Epoxides Part 2 – [Practice Problems](#)

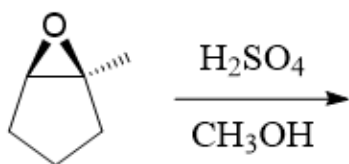
For clicker question voting, go to:  
<https://pollev.com/lauriestarke263>



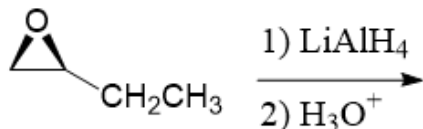
1 Predict the major product, and draw the mechanism.



2 Predict the major product, and draw the mechanism.

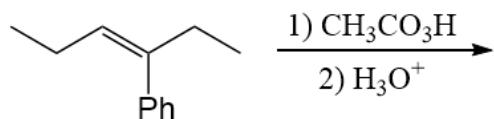


3 Predict the major product, and describe the mechanism.



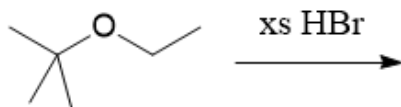
- A) Protonate, attack, deprotonate
- B) Protonate, attack
- C) Deprotonate, attack
- D) Deprotonate, attack, protonate
- E) Attack, protonate

4 Predict the major product.

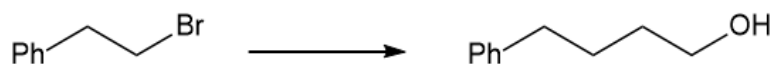


5 6

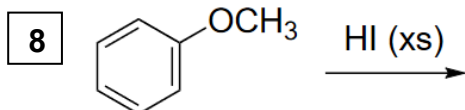
Predict the major products, and draw a mechanism.



7 Which reagents would be best to achieve the following synthesis?

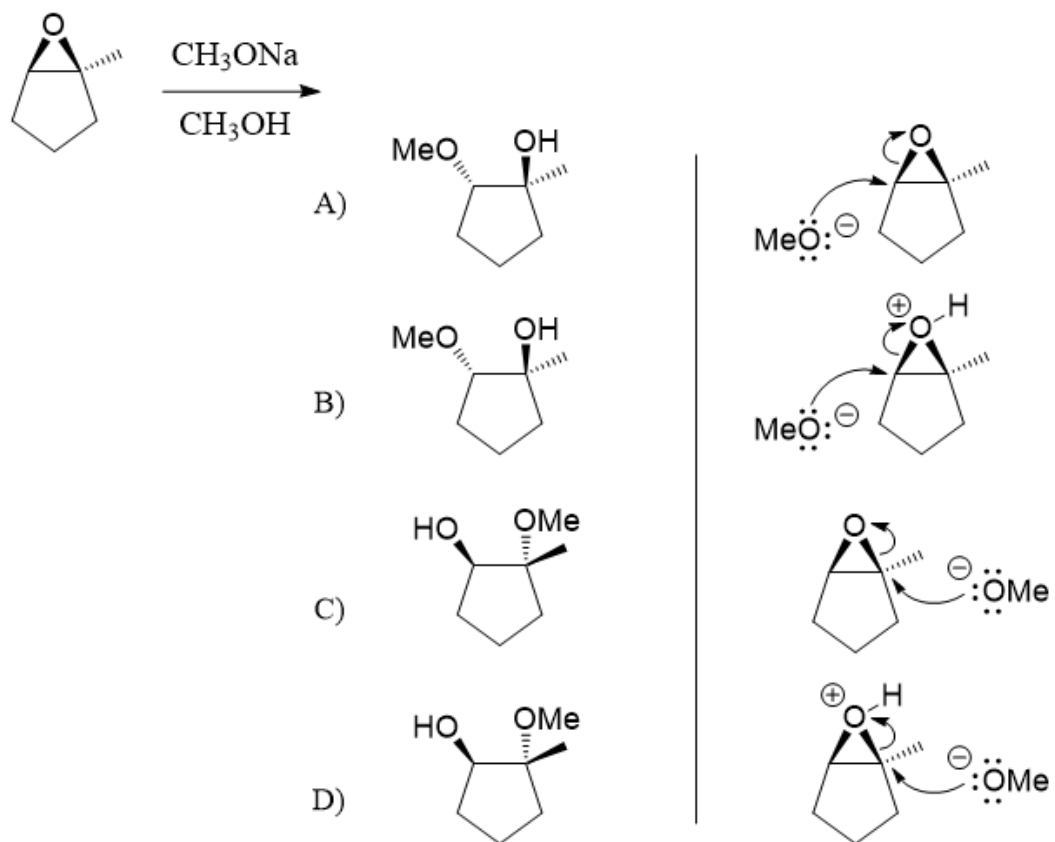


Predict the major products.



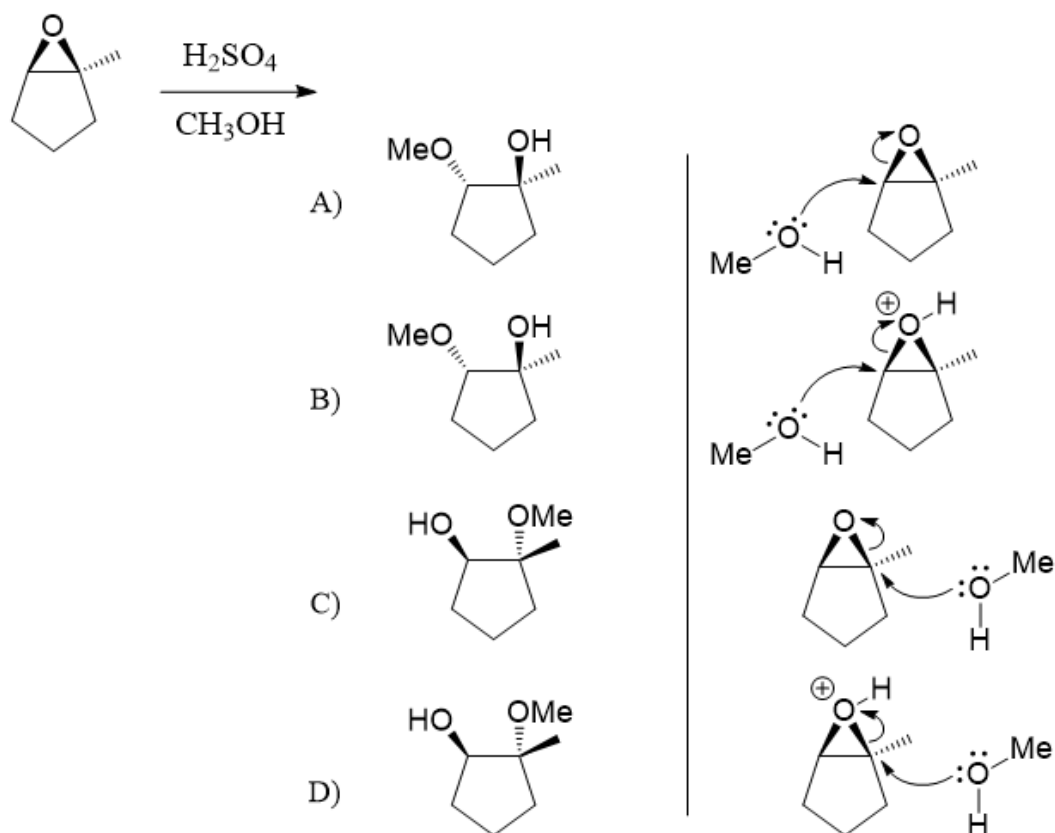
1

Predict the major product, and select the correct mechanism step.



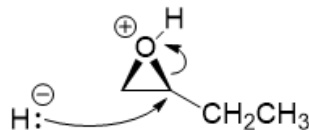
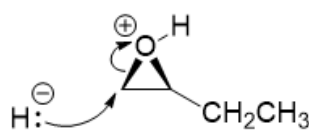
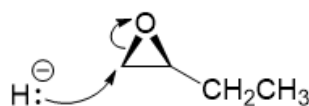
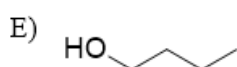
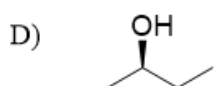
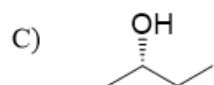
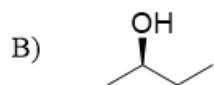
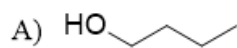
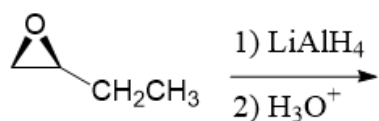
2

Predict the major product, and select the correct mechanism step.



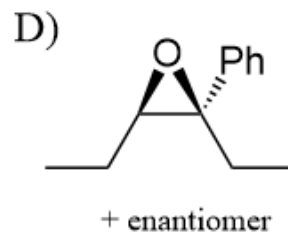
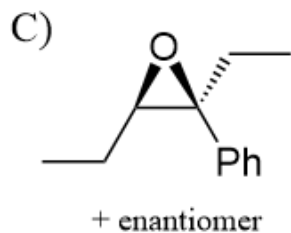
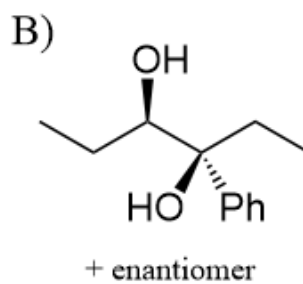
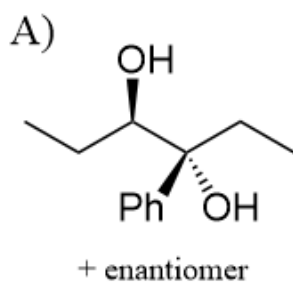
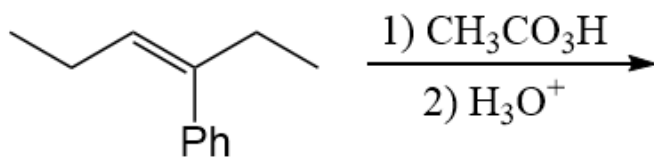
3

Predict the major product, and select the correct mechanism step.



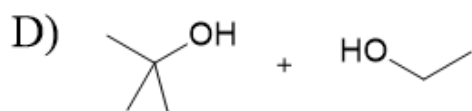
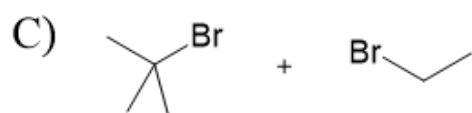
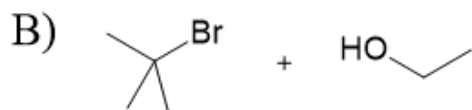
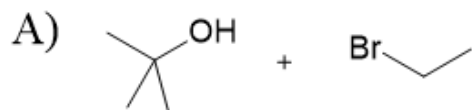
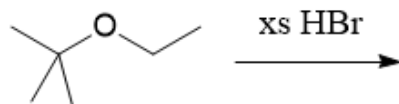
4

Predict the major product.



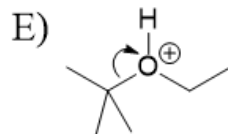
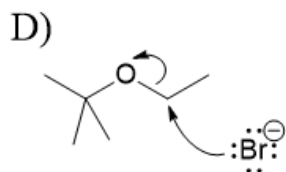
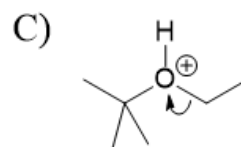
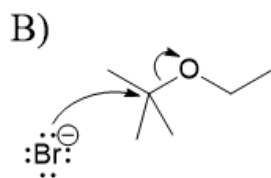
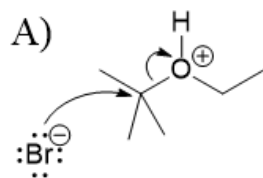
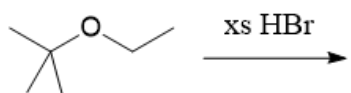
5

Predict the major products of the following reaction.



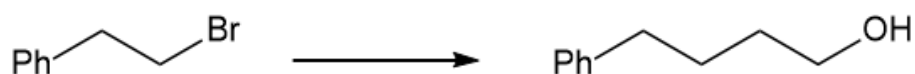
6

Which of the following is a correct mechanism step for the given reaction?



7

Which reagents would be best to achieve the following synthesis?

A) 1) *t*-BuOK2)  $\text{H}_3\text{O}^+$ B) 1) *t*-BuOK2)  $\text{BH}_3\text{-THF}$ 3)  $\text{H}_2\text{O}_2, \text{NaOH}$ C) 1)  $\text{BrMg-CH}_2\text{-CH}_2\text{-OH}$ 2)  $\text{H}_3\text{O}^+$ 

D) 1) Mg

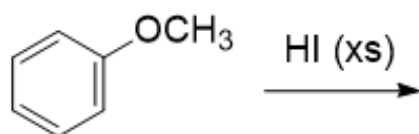
2)  $\text{H-C(=O)-CH}_3$ 3)  $\text{H}_3\text{O}^+$ 

E) 1) Mg

2)  $\text{C}_2\text{H}_4\text{O}$ 3)  $\text{H}_3\text{O}^+$ 

Which of the following are the major products of the reaction shown?

8

A)  $\text{C}_6\text{H}_6$  +  $\text{CH}_3\text{OH}$ B)  $\text{C}_6\text{H}_5\text{OH}$  +  $\text{CH}_4$ C)  $\text{C}_6\text{H}_5\text{I}$  +  $\text{CH}_3\text{OH}$ D)  $\text{C}_6\text{H}_5\text{OH}$  +  $\text{CH}_3\text{I}$ E)  $\text{C}_6\text{H}_6$  +  $\text{CH}_3\text{I}$