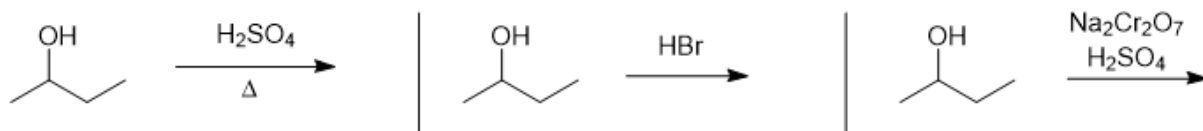


CHM 3150 Organic Chemistry II
Dr. Laurie S. Starkey, Cal Poly Pomona
Chapter 12 Alcohols Part 3 – [Practice Problems](#)

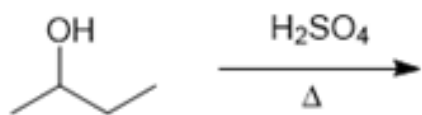
For clicker question voting, go to:
<https://pollev.com/lauriestarke263>



1 Predict the major products for the following reactions.

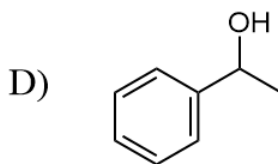
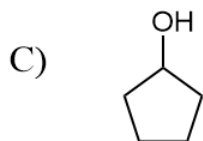
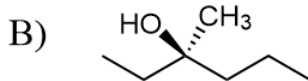
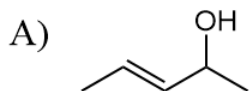


mechanism?



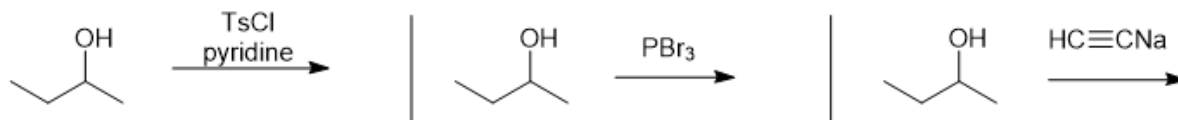
2 Which would undergo the **SLOWEST** dehydration mechanism?

& Explain

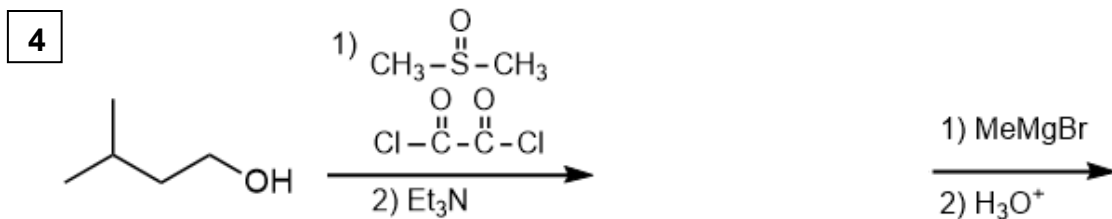


E) None of the above (can't predict)

3 Predict the major products for the following reactions.

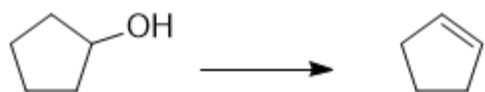
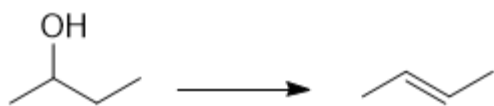


Predict the major product.



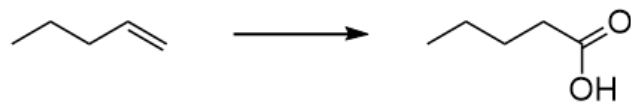
Which reagents would be best to achieve the following synthesis?

5

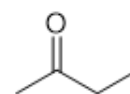
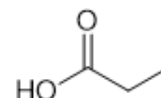
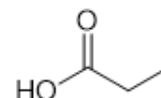
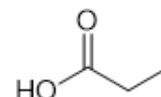
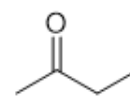
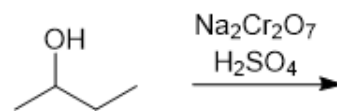
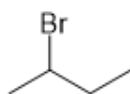
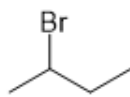
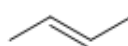
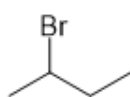
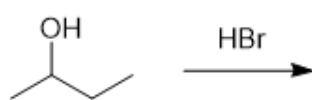
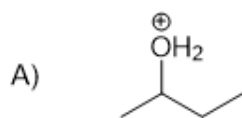
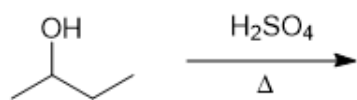


- I. 1) TsCl , pyridine; 2) NaOEt
- II. 1) TsCl , pyridine; 2) $t\text{-BuOK}$
- III. H_2SO_4 , heat

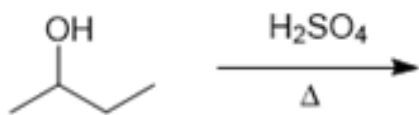
6



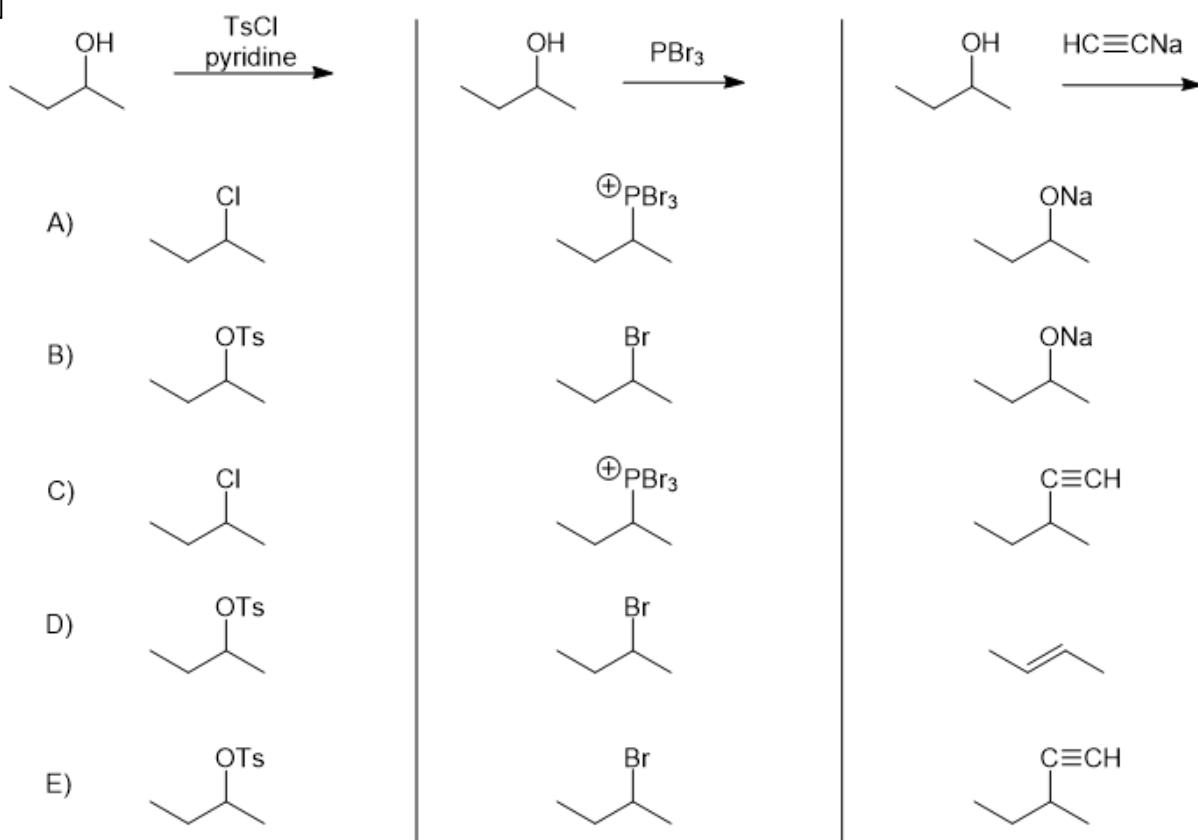
1 Predict the major products for the following reactions.



1 – mechanism?

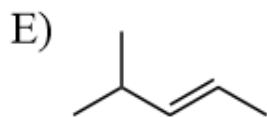
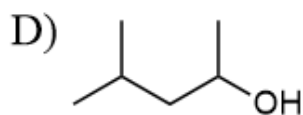
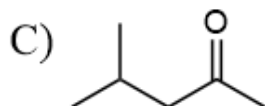
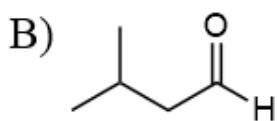
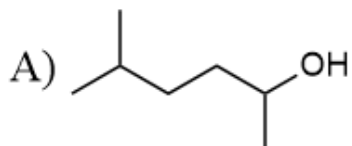
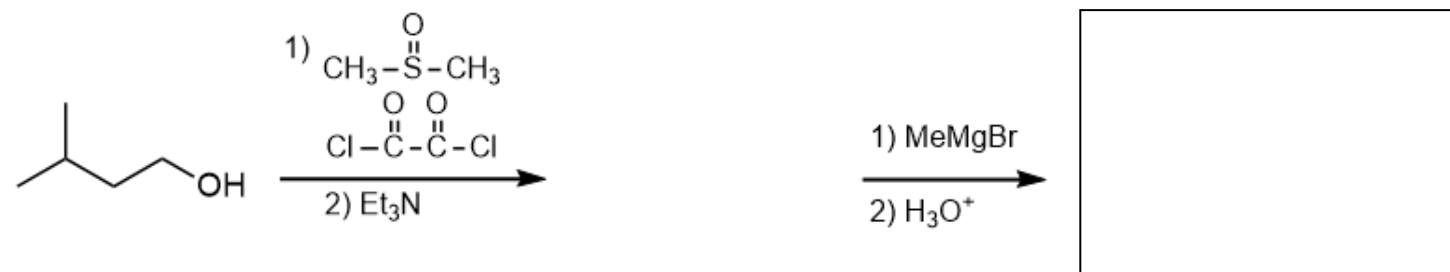


3 Predict the major products for the following reactions.



4

Predict the major product.



5 Which of the given reagents would achieve each of the following syntheses?

I. 1) TsCl, pyridine; 2) NaOEt
II. 1) TsCl, pyridine; 2) *t*-BuOK
III. H₂SO₄, heat

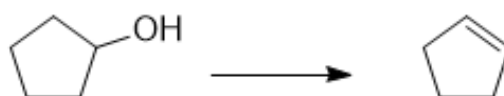
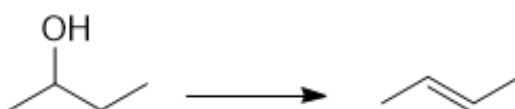
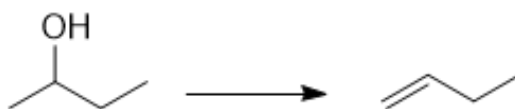
A) I only

B) II only

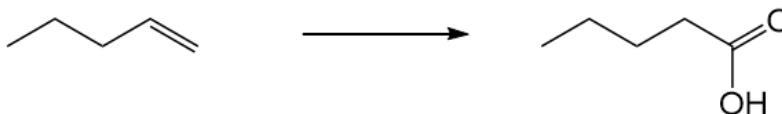
C) III only

D) I and III

E) I, II and III



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



A) 1) O₃
2) Zn, H₂O

B) 1) O₃
2) PCC

C) 1) H₃O⁺
2) Na₂Cr₂O₇, H₂SO₄

D) 1) Hg(OAc)₂, H₂O
2) NaBH₄
3) PCC

E) 1) BH₃-THF
2) H₂O₂, NaOH
3) Na₂Cr₂O₇, H₂SO₄