

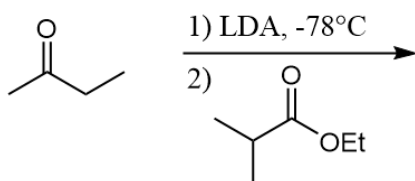
CHM 3150 Organic Chemistry II
Dr. Laurie S. Starkey, Cal Poly Pomona
Chapter 21, Enols & Enolates, Part 3 – [Practice Problems](#)

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

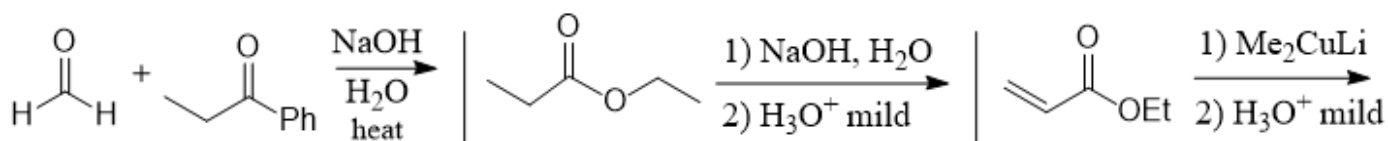


- 1 Draw a complete Lewis structure for nitromethane, CH_3NO_2 , and draw its conjugate base.

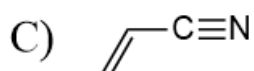
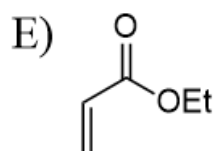
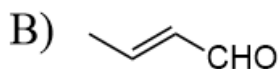
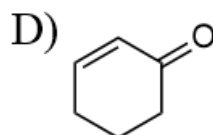
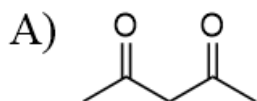
- 2 Predict the major product.



- 3 Predict the major products for the following reactions.

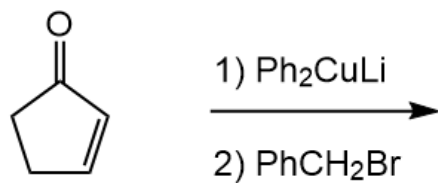


- 4 Which of the following is NOT an example of a "Michael acceptor"?

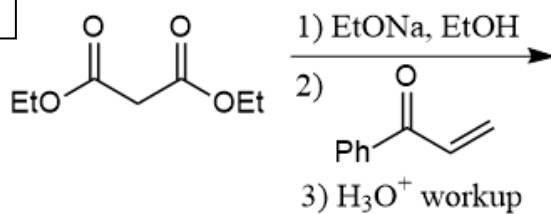


5

Predict the major product.

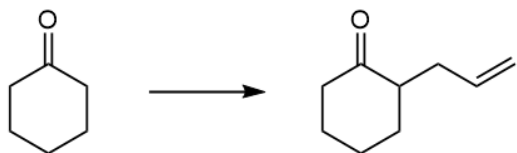


6

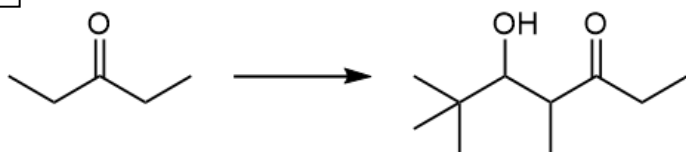


7

Provide the necessary reagents.

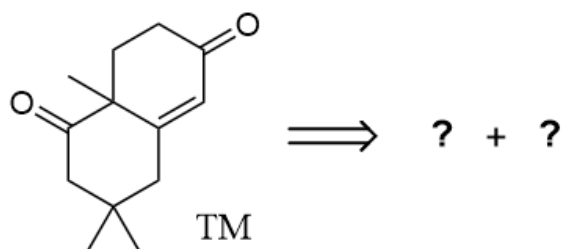


8

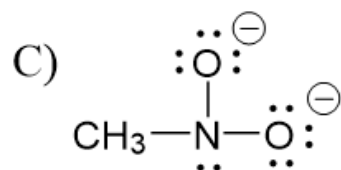
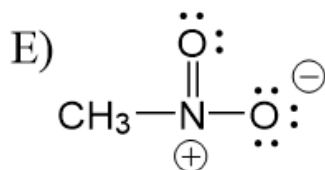
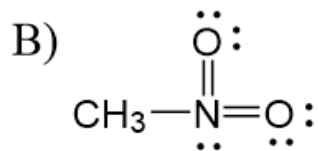
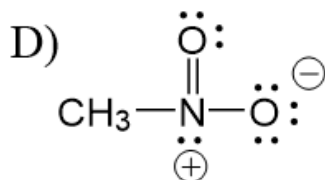
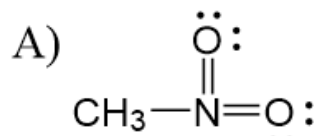


9

Provide the starting materials needed to prepare the given target molecule by a Robinson Annulation.

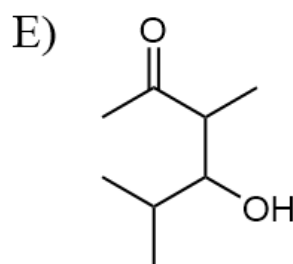
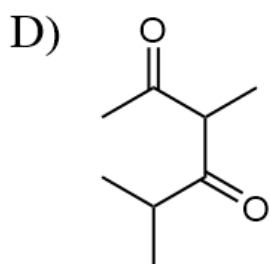
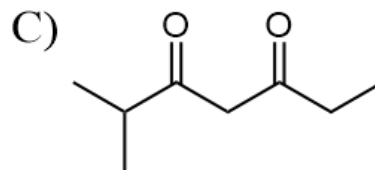
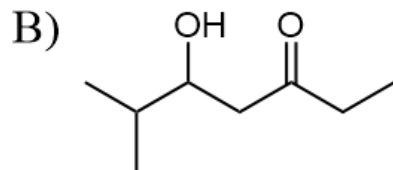
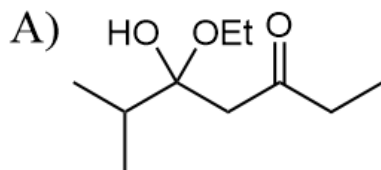
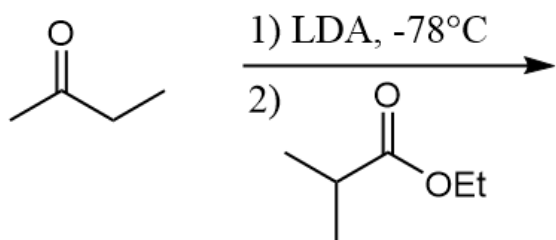


1 Which of the following represents the correct Lewis structure for nitromethane, CH_3NO_2 ?



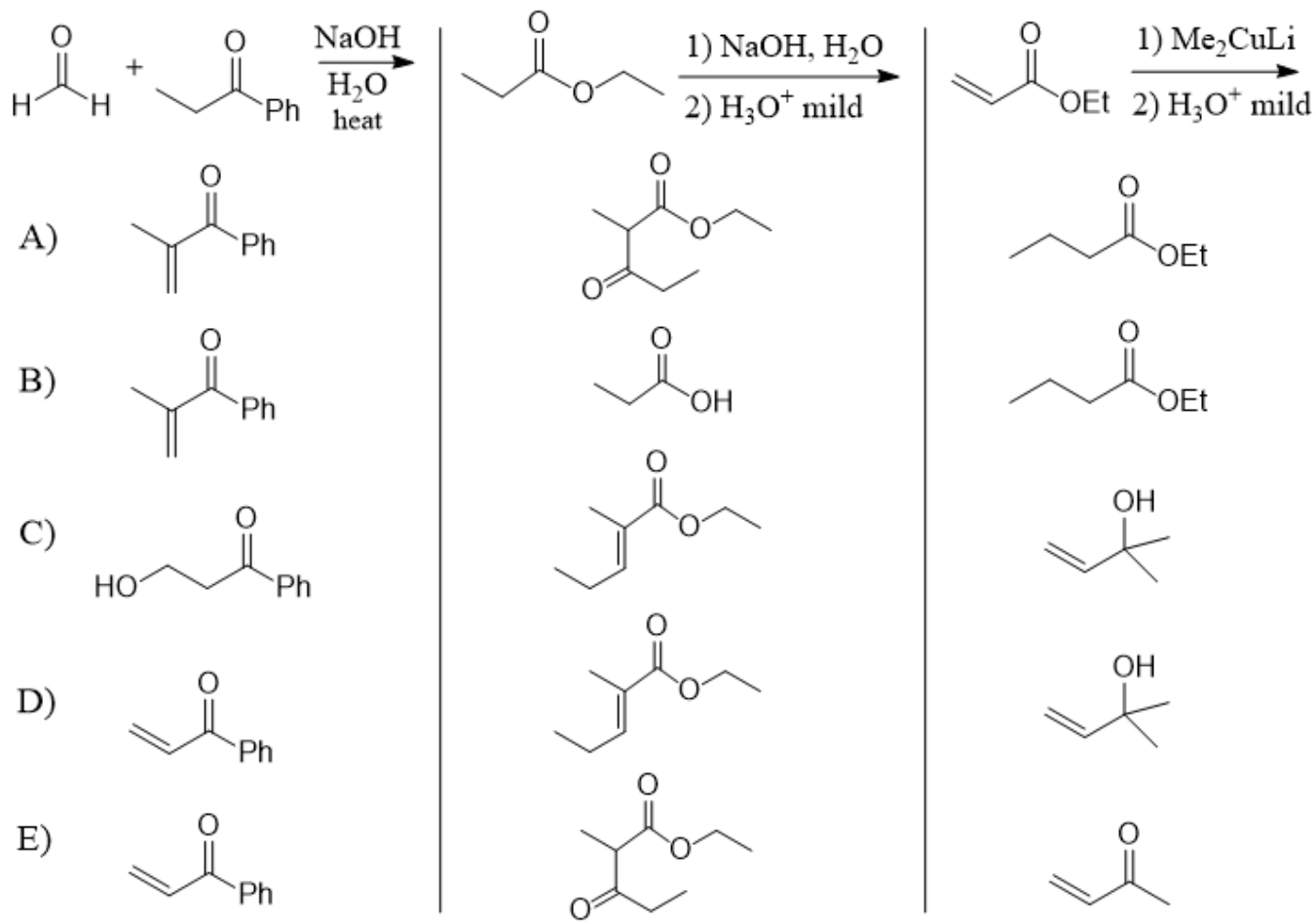
2

Predict the major product.



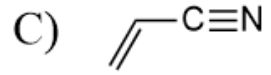
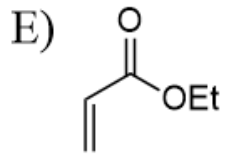
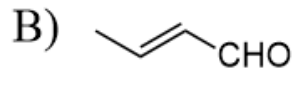
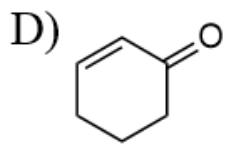
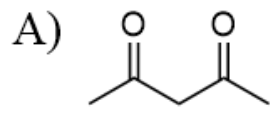
Predict the major products for the following reactions.

3



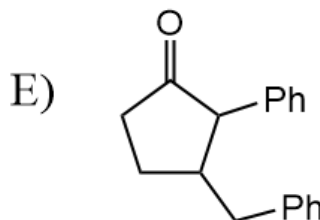
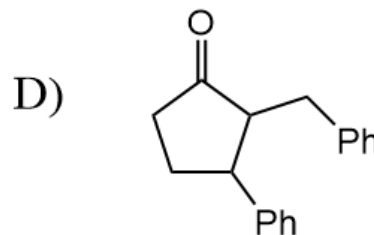
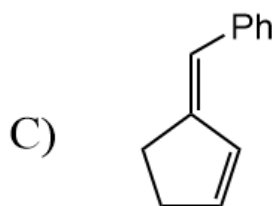
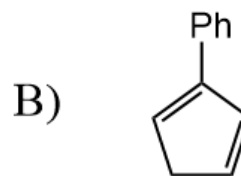
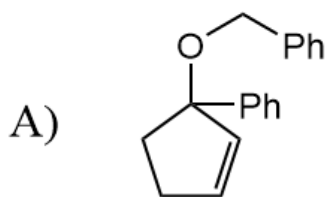
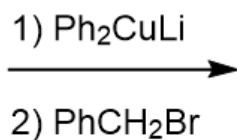
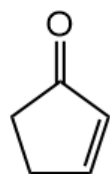
4

Which of the following is NOT an example of a "Michael acceptor"?



5

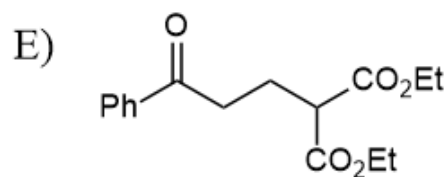
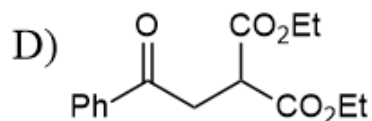
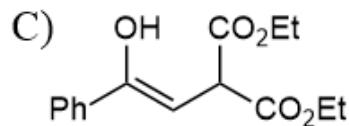
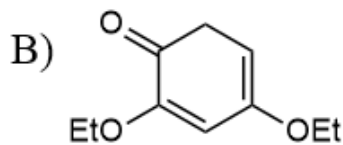
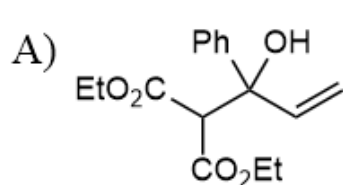
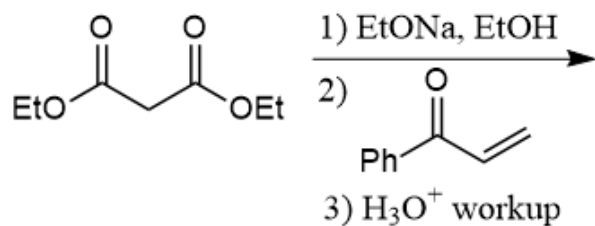
Predict the major product.



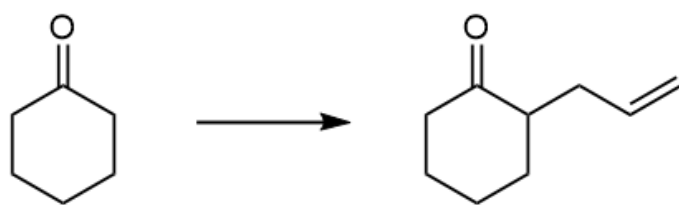
See SkillBuilder 21.9

6

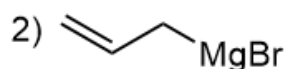
Predict the major product.



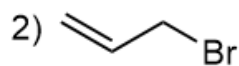
7 Provide the necessary reagents.



A) 1) LDA



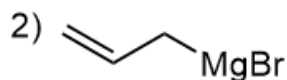
B) 1) LDA



C) 1) allylmagnesium bromide

2) H_3O^+

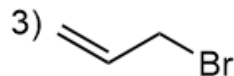
D) 1) ethylene glycol + TsOH



3) H_3O^+ , heat

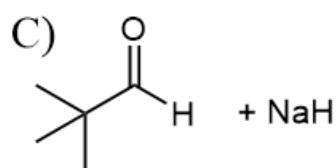
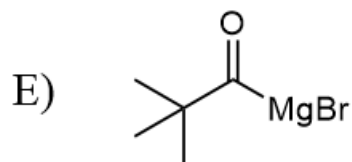
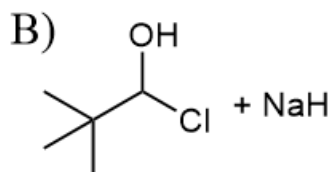
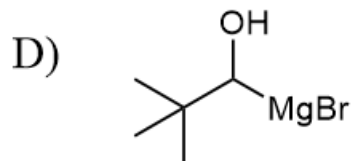
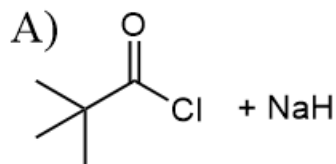
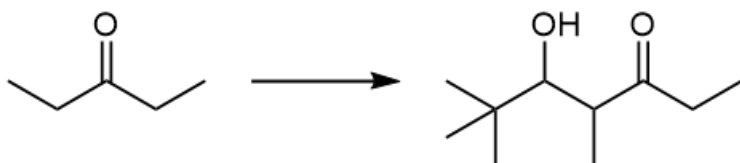
E) 1) ethylene glycol + TsOH

2) LDA



4) H_3O^+ , heat

8 Provide the necessary reagent(s), assuming there is an aqueous acidic workup.



Provide the starting materials needed to prepare the given target molecule by a Robinson Annulation.

