CHM 3150 Organic Chemistry II
Dr. Laurie S. Starkey, Cal Poly Pomona
Chapter 21, Enols & Enolates, Part 4 – Practice Problems

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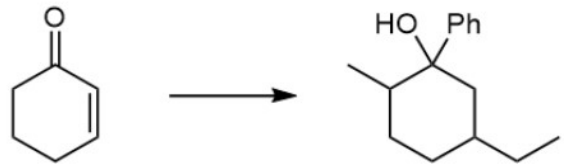
https://pollev.com/lauriestarke263

1

Which of the following lists the reagents required for the given transformation in the correct order of use?



A) Et_2CuLi; PhMgBr; LDA; MeI

B) Et_2CuLi; MeI; PhMgBr

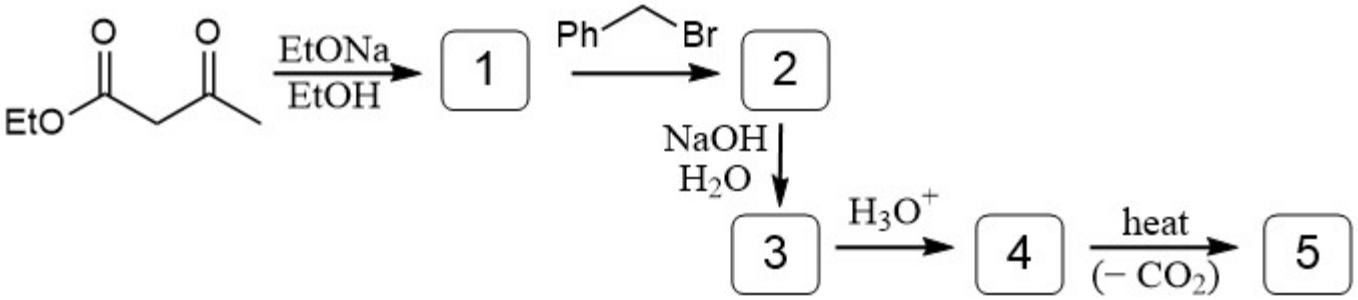
C) LDA; MeI; Et_2CuLi; PhMgBr

D) PhMgBr; Me_2CuLi; Et_2CuLi

E) Et_2CuLi; LDA; MeI; PhMgBr

2

Predict the major products 1-5.



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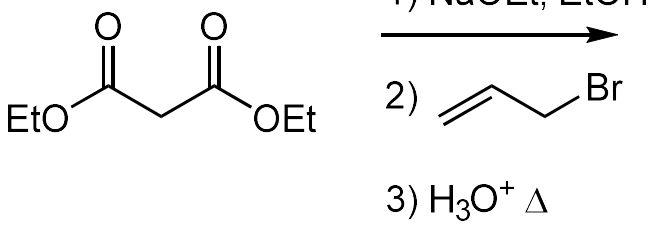
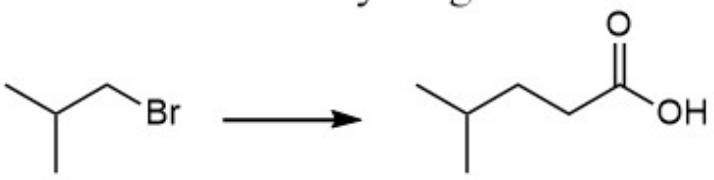


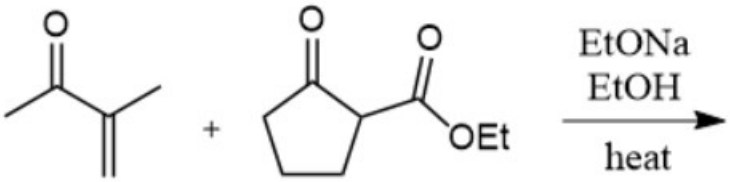
Provide the necessary reagents.

4



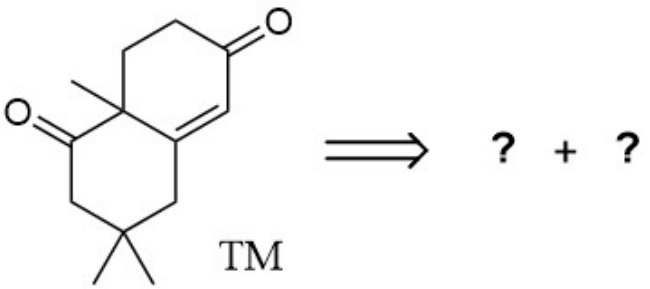
5

Predict the major Robinson annulation product.



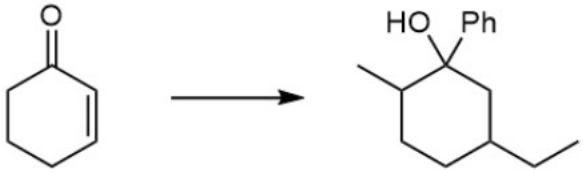
6

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



⟹ ? + ?

1 Which of the following lists the reagents required for the given transformation in the correct order of use?



A) Et_2CuLi; PhMgBr; LDA; MeI

B) Et_2CuLi; MeI; PhMgBr

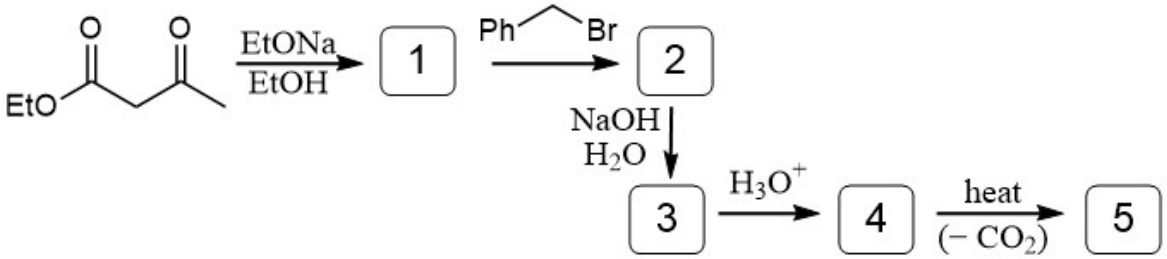
C) LDA; MeI; Et_2CuLi; PhMgBr

D) PhMgBr; Me_2CuLi; Et_2CuLi

E) Et_2CuLi; LDA; MeI; PhMgBr

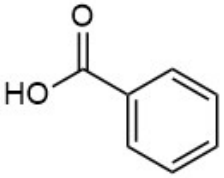
Predict the major products 1-5.

2



Which of the following is the final product (5)?

A)



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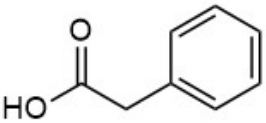

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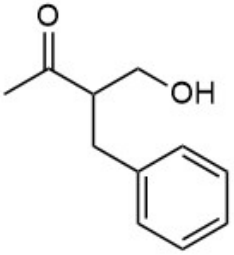
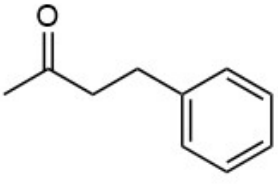
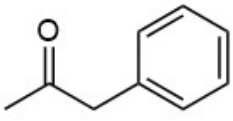


D)



E)

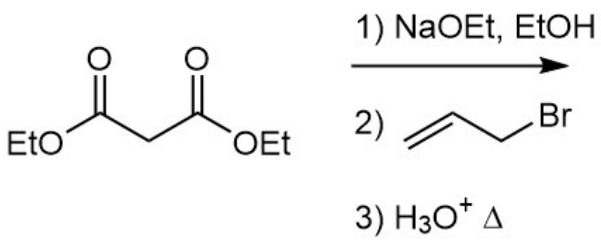


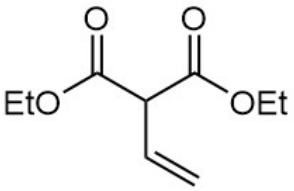
SkillBuilder 21.5

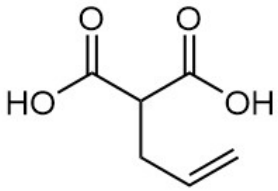
Predict the major product.

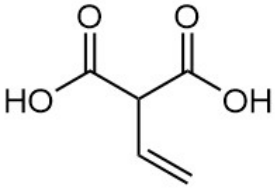
SkillBuilder 21.6

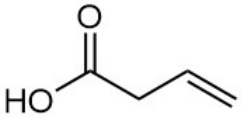
3

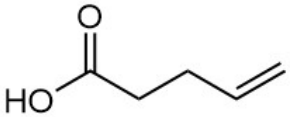


A) 

B) 

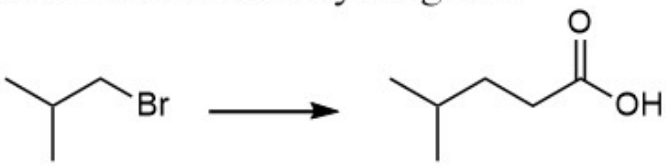
C) 

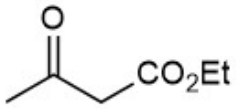
D) 

E) 

4

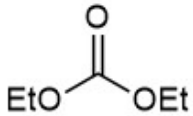
Provide the necessary reagents.



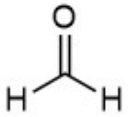
A) 1) 

+ NaOEt 2) H_3O^+, heat

B) 1) EtO_2C CO_2Et + NaOEt 2) H_3O^+, heat

C) 1) Mg 2) 

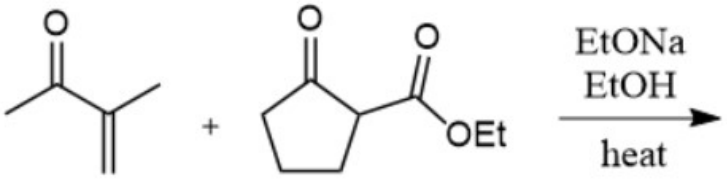
3) H_3O^+

D) 1) Mg 2) 

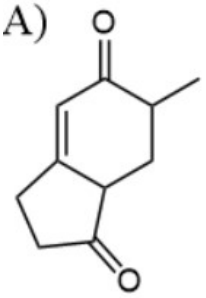
3) $Na_2Cr_2O_7$, H_2SO_4

E) 1) NaCN 2) H_3O^+, heat

5 Predict the major Robinson annulation product.



A)



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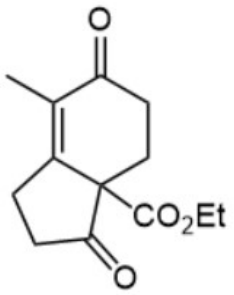
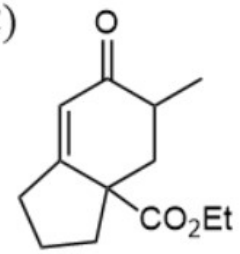
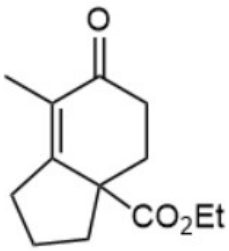


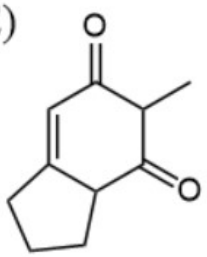
C)



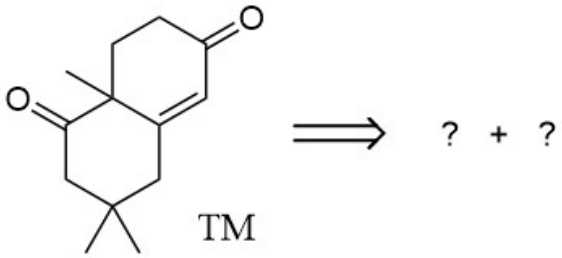
D)



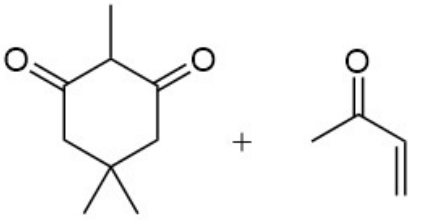
E)



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



A)



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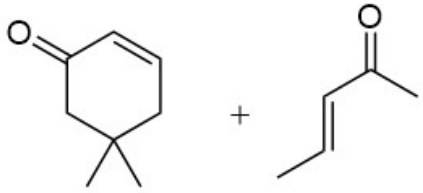
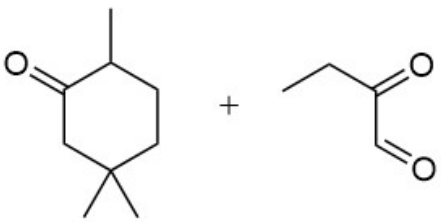


C)



D)