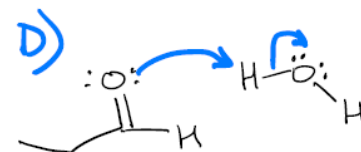
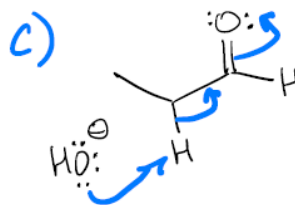
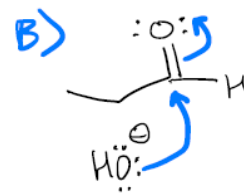
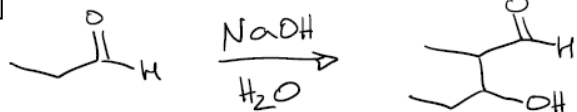




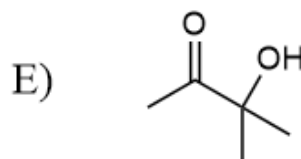
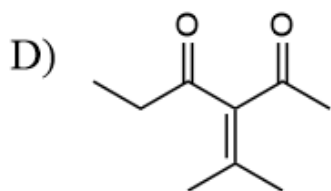
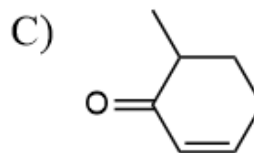
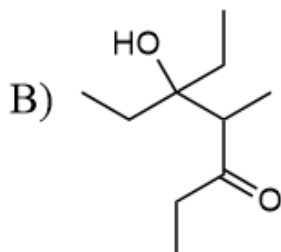
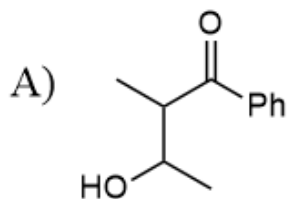
What is the most likely first step in the mechanism for the given reaction?

1



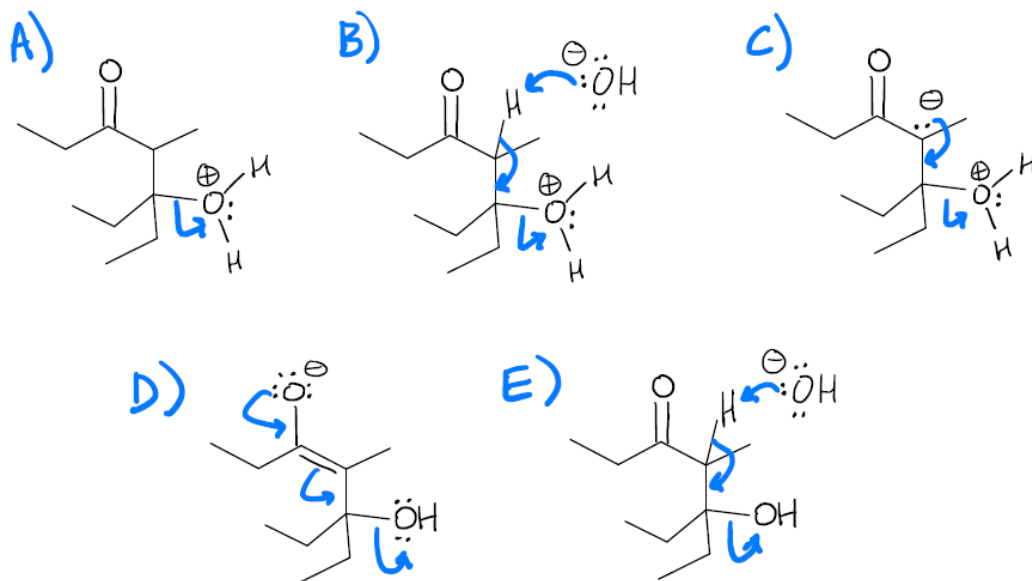
2

Which of the following could NOT be a product of an aldol reaction?



For an aldol condensation conducted with NaOH in water, which of the following steps is likely for the mechanism to lose water?

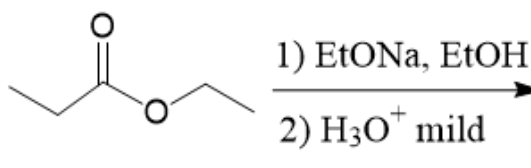
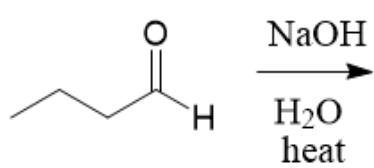
3



4

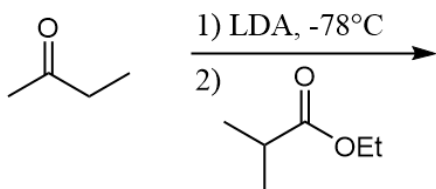
Predict the major products for the following reactions.

5



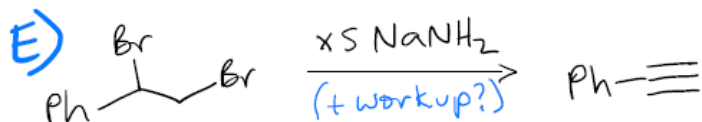
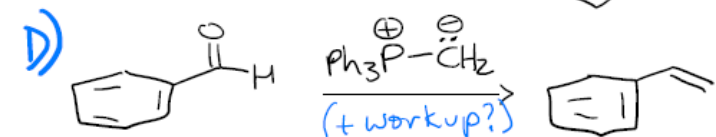
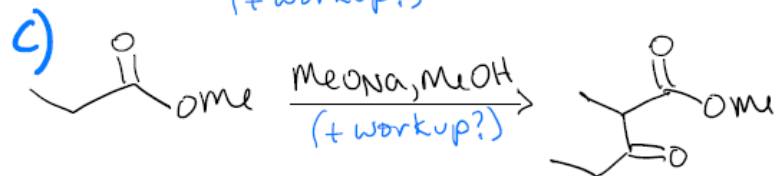
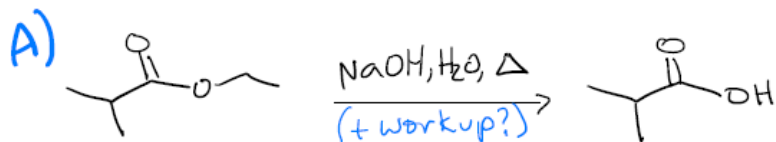
Provide a mechanism for the second reaction.

6 Predict the major product.



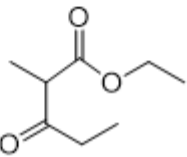
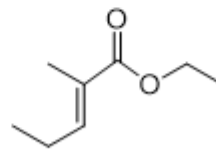
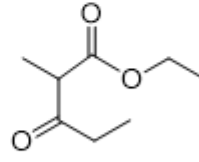
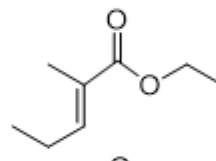
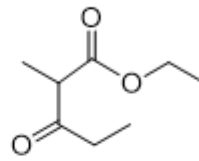
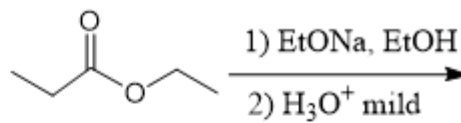
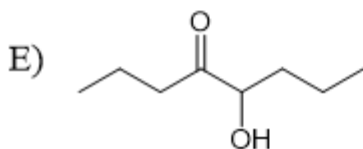
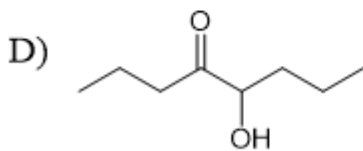
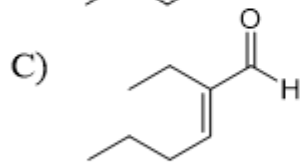
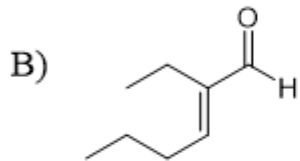
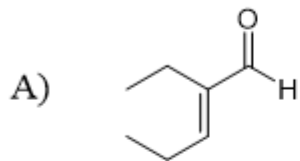
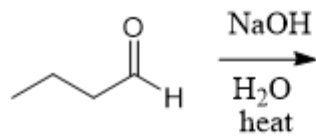
7

To obtain a neutral product, each of the following reactions requires an acidic aqueous workup EXCEPT:



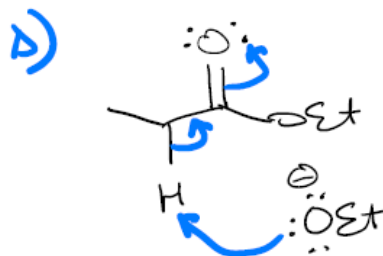
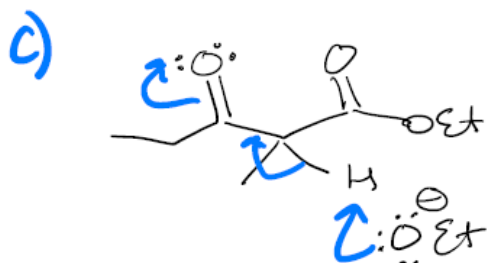
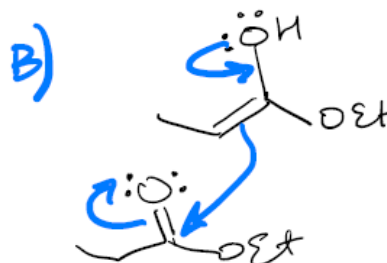
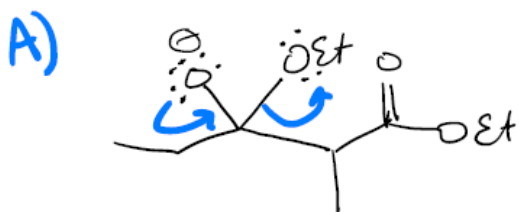
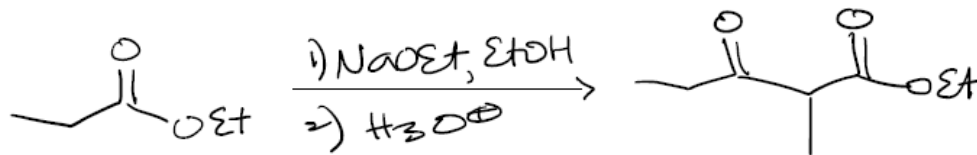
4

Predict the major products for the following reactions.



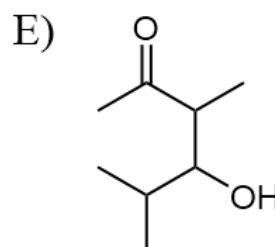
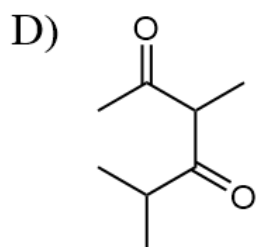
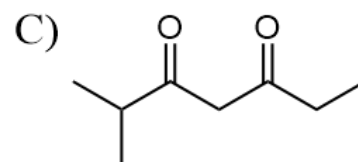
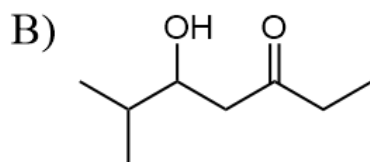
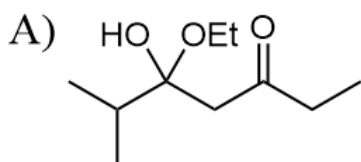
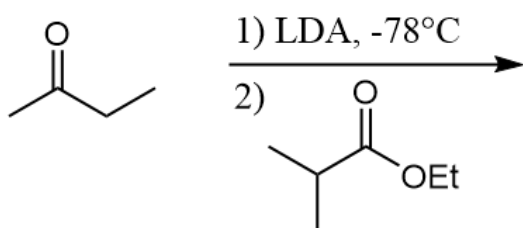
5

Which of the following is NOT a likely step in the mechanism for the given reaction?



6

Predict the major product.



7

To obtain a neutral product, each of the following reactions requires an acidic aqueous workup EXCEPT:

