

Final Exam

Comprehensive: about 1/4 from each previous exam plus the new material.

Use the midterms as a guide to the material you should study.

There will be about 105 points from multiple guess questions plus about 75 points of written answer questions.

Cover sheet will be like exam 3. D-aldohexose structures will also be given.

Who is the Clicker Point Champion?

The Top Five Candidates Are:



Daniel
A



Herman
B



Mahyar
C



Vela
D



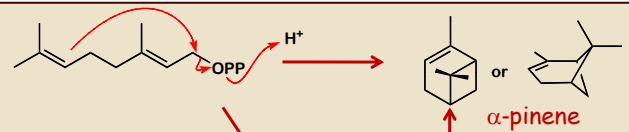
Yan
E

96.2 pts



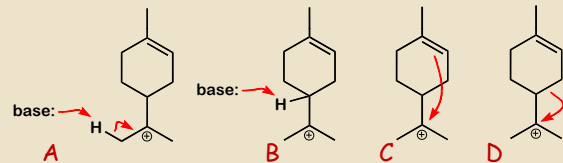
Geranyl pyrophosphate

Propose a biosynthetic pathway

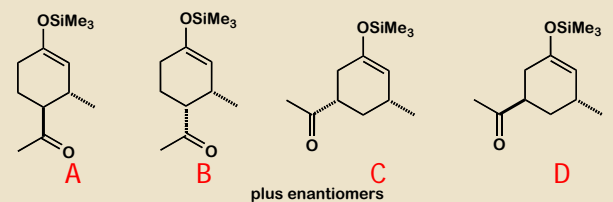
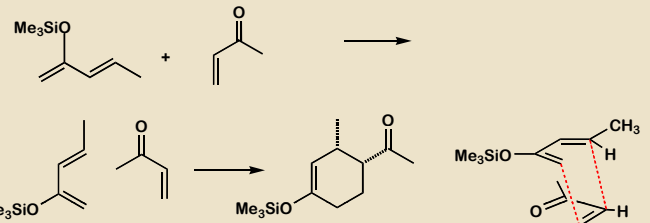
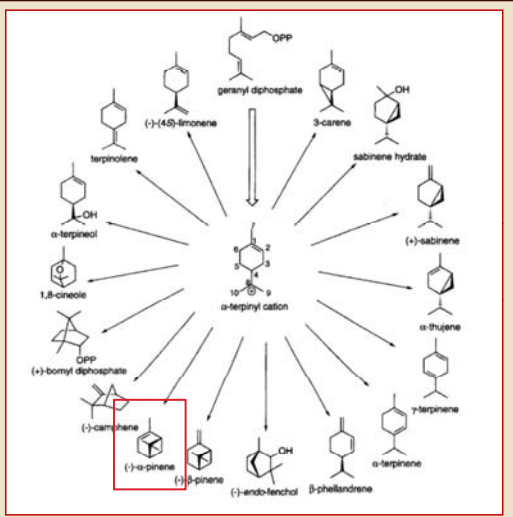
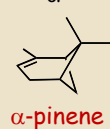
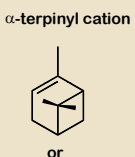
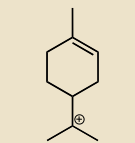


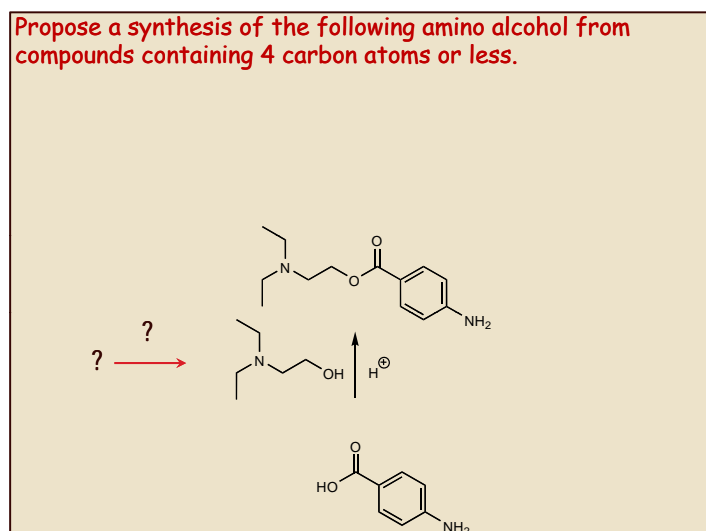
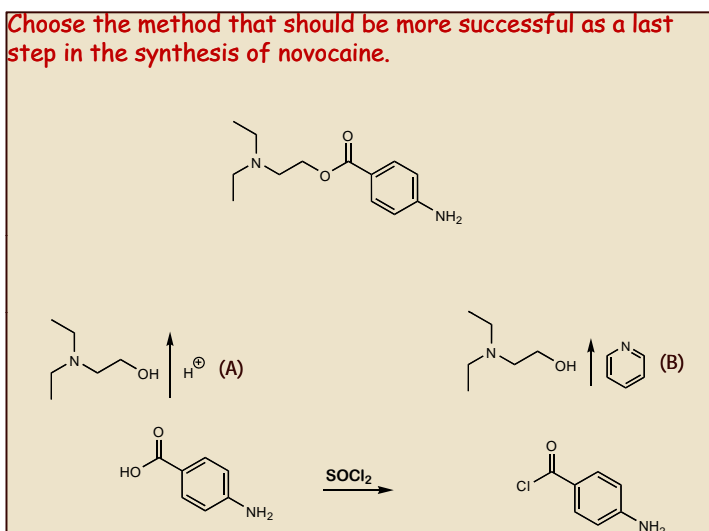
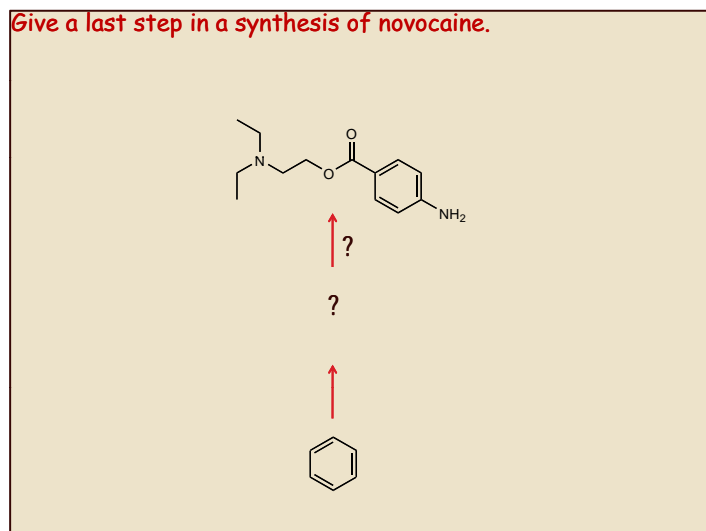
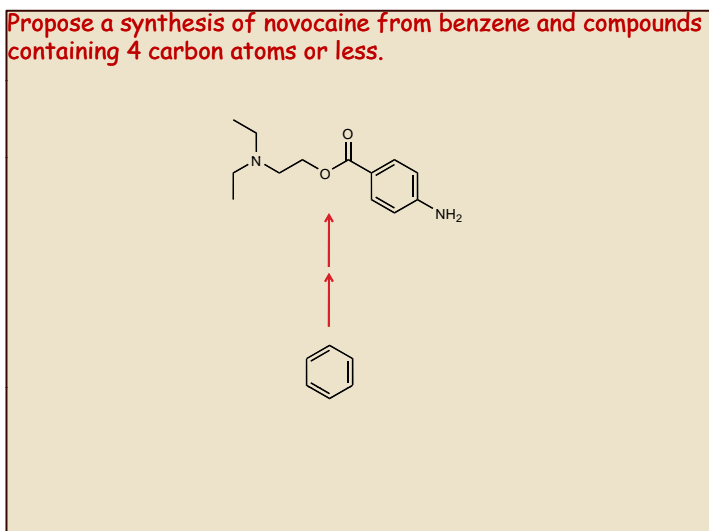
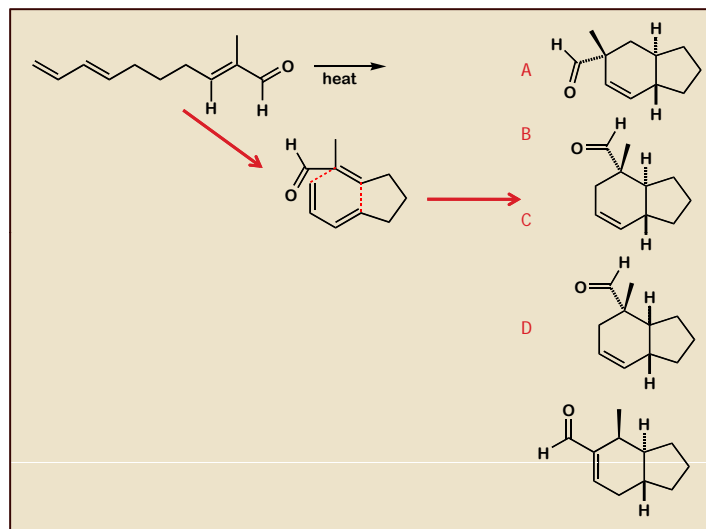
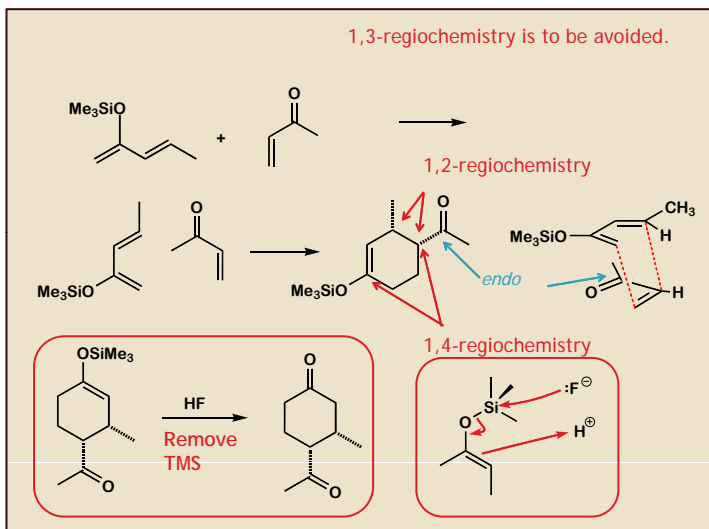
What happens next?

α -terpinyl cation

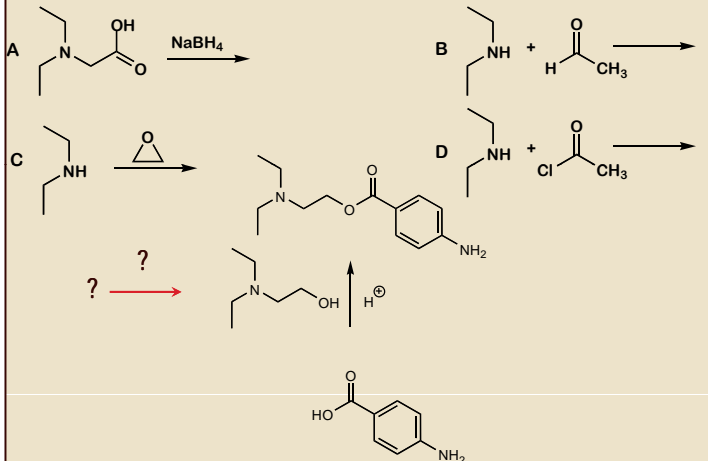


Terpenes

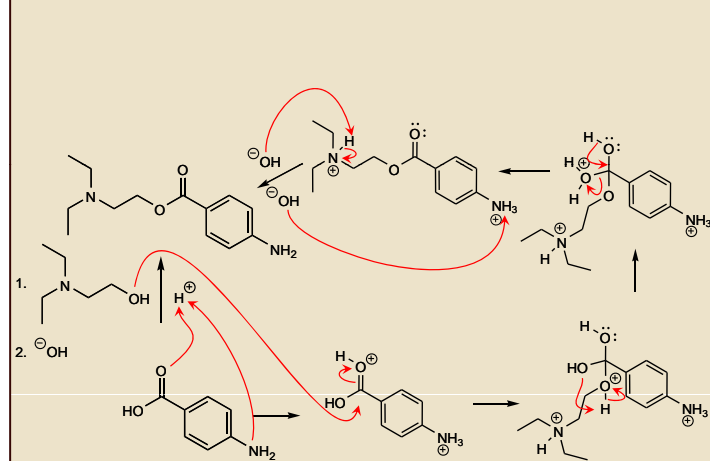




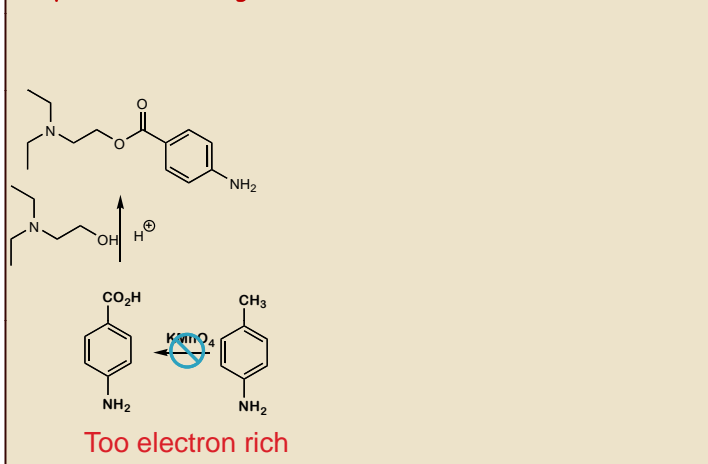
Propose a synthesis of the following amino alcohol from compounds containing 4 carbon atoms or less.



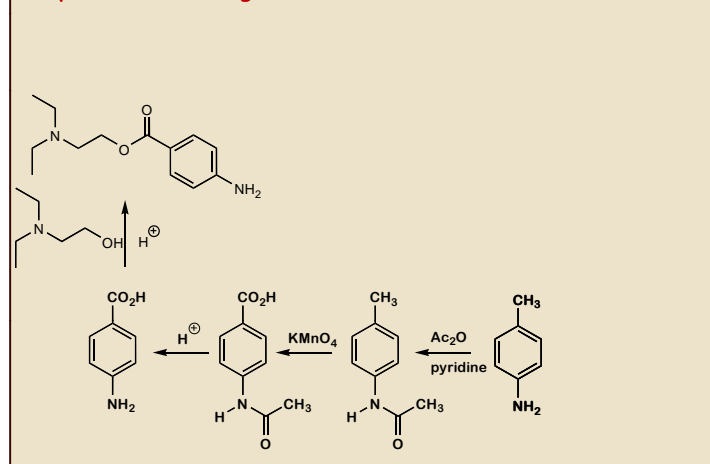
Using the curved arrow formalism show how the following transformation occurs.



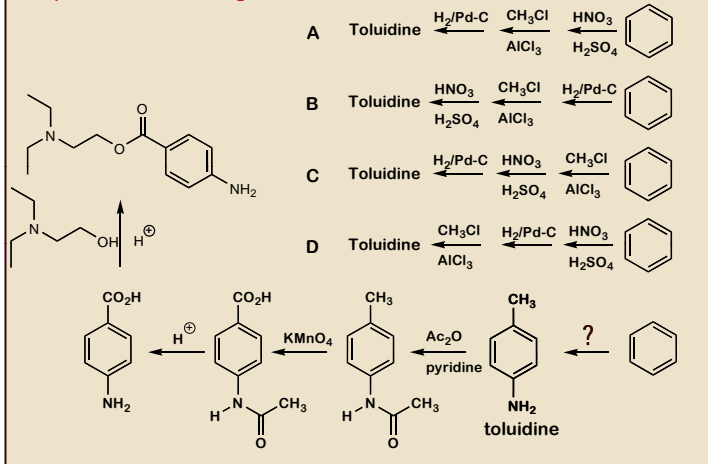
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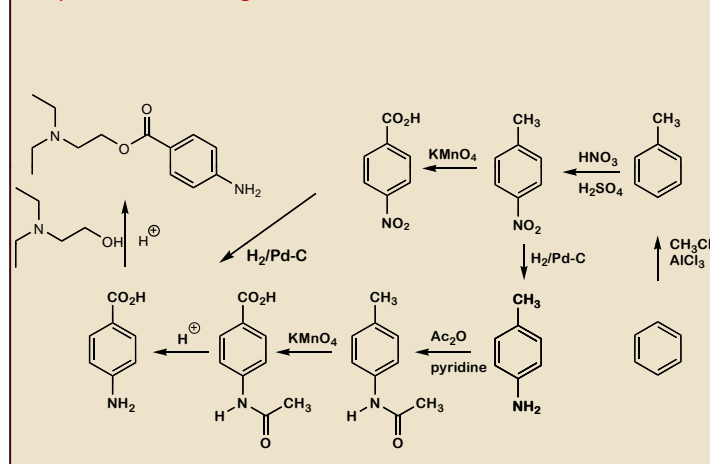
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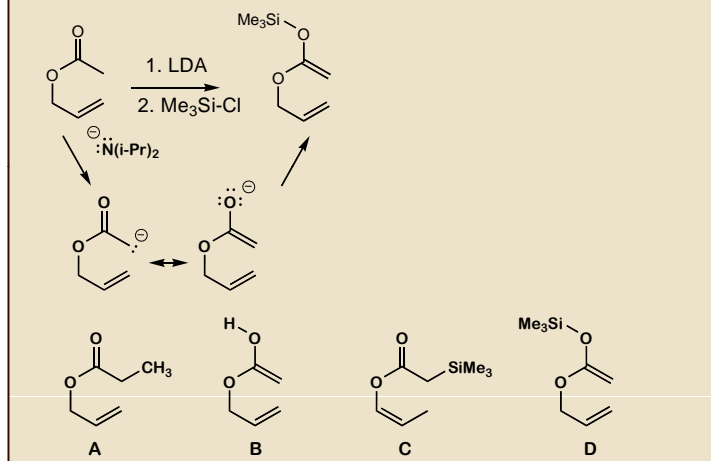
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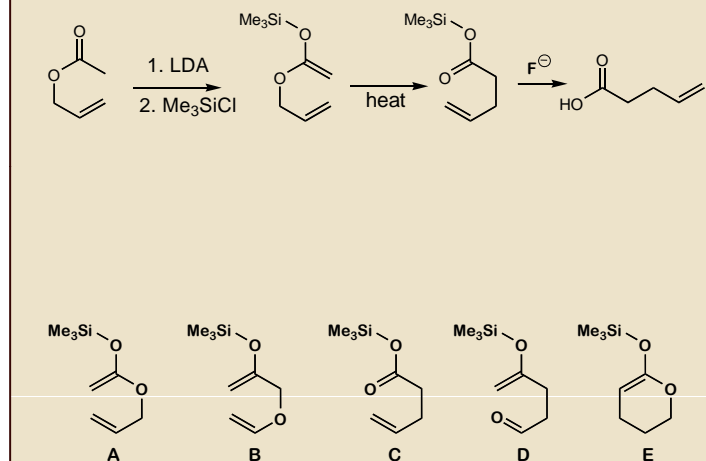
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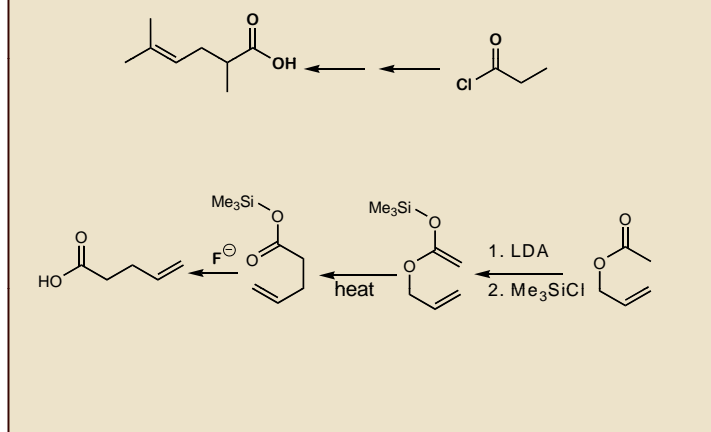
Predict the product of the following reaction.



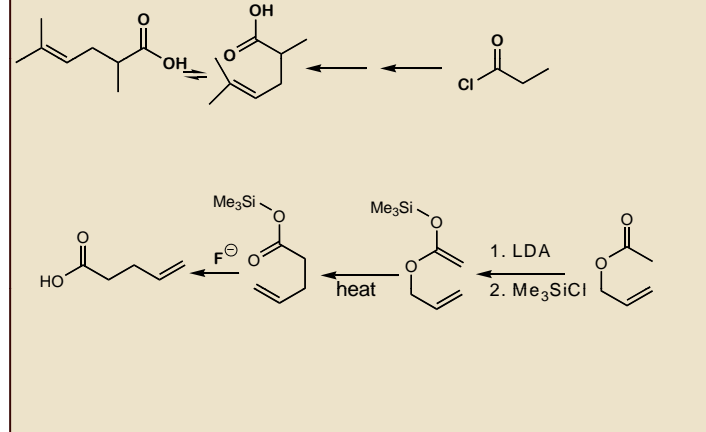
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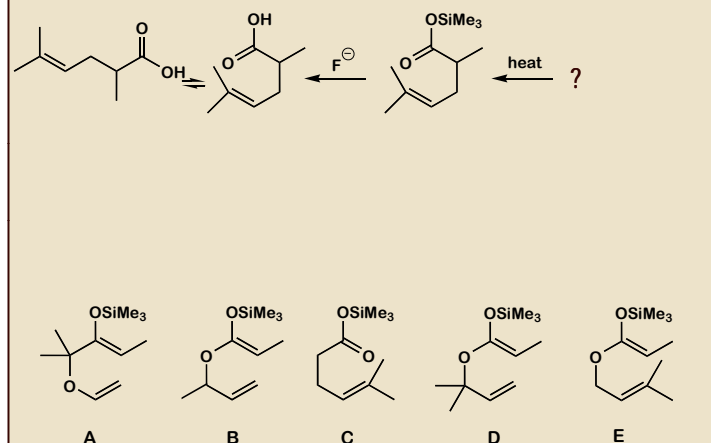
Propose a synthesis of the following compound, using the Claisen reaction, from propionyl chloride compounds containing four carbons or less.



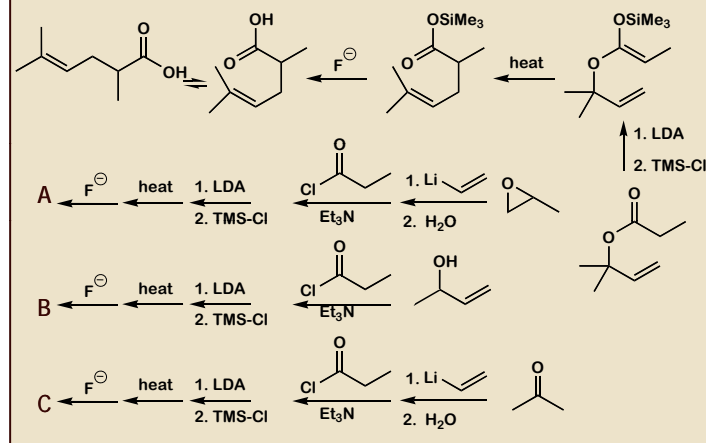
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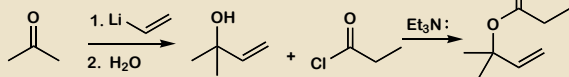
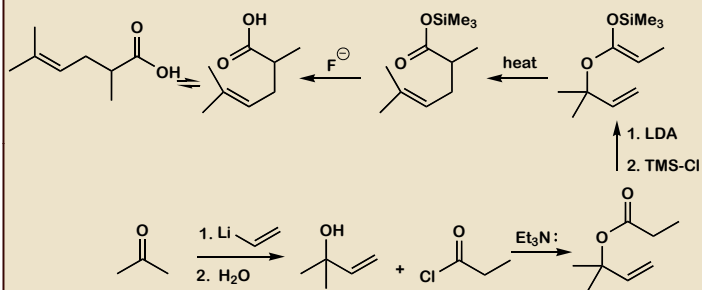
Choose the Claisen reactant that would give the following product.



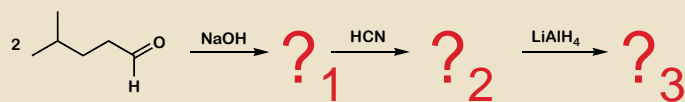
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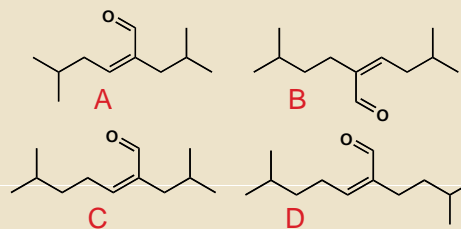
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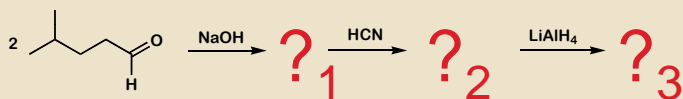
Aldol



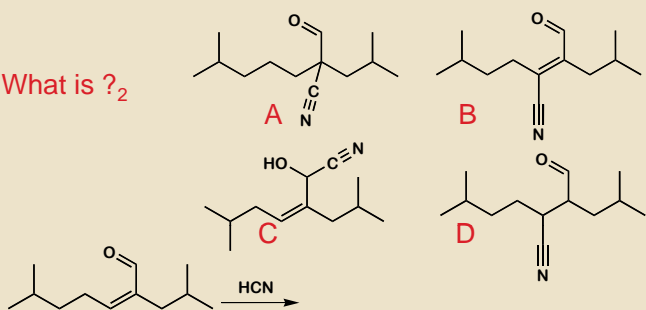
What is ?₁



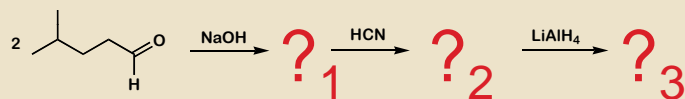
Aldol



What is ?₂



Aldol



What is ?₃

