

## TA Final Exam Review

9:30 – 11:30 AM Monday May 11 Javits 100

9:30 – 11:30 AM Tuesday May 12 Javits 100

### Final Exam

1:00 AM – 1:30 PM Friday May 15

Sports Complex – Main Arena (not the gym)

### From the Course Information Page

"Because organic chemistry is a cumulative subject, your knowledge at the end of the course is most important. An outstanding final exam by any student will be weighed more heavily in determining the final grade. However, a higher grade based on an outstanding final is not common. The final exam should not be relied upon to considerably raise one's grade."

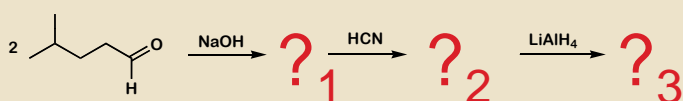
## What is on the exam?

10 3 point multiple guess (connected)

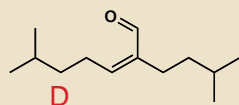
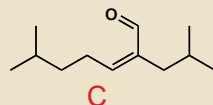
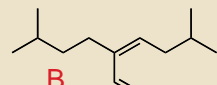
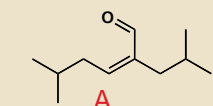
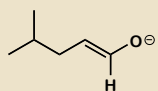
14 5 point multiple guess

80 points Short Answer

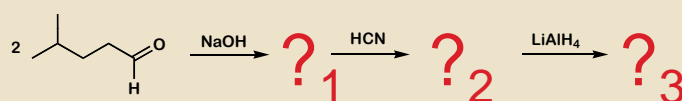
### Aldol



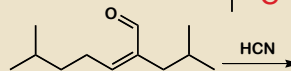
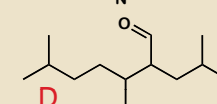
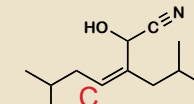
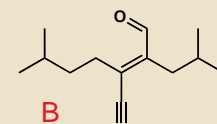
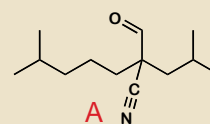
What is ?<sub>1</sub>



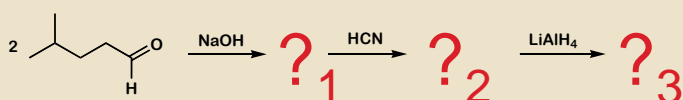
### Aldol



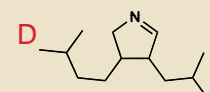
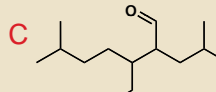
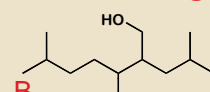
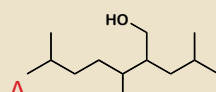
What is ?<sub>2</sub>



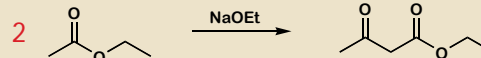
### Aldol



What is ?<sub>3</sub>

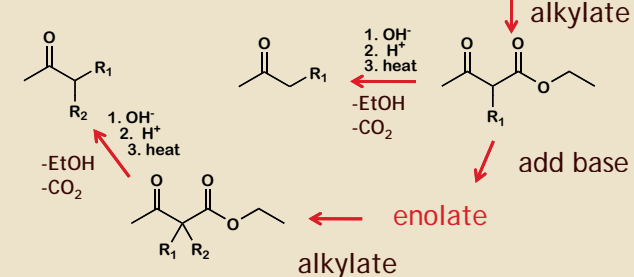


### ethyl acetoacetate



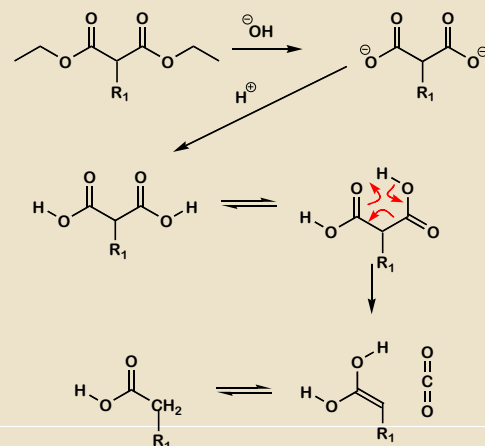
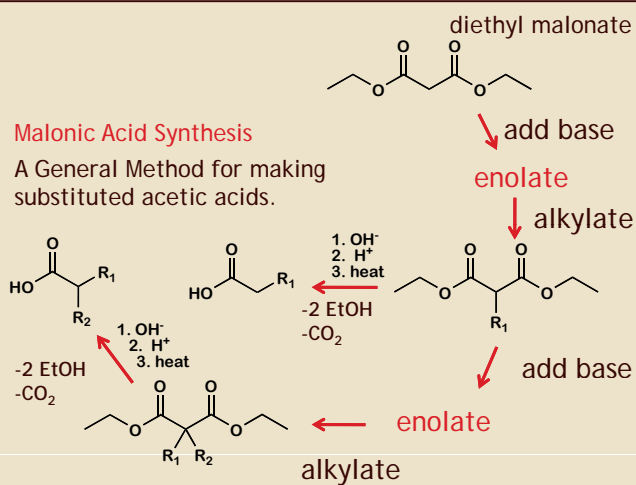
### Acetoacetic Ester Synthesis

A General Method for making substituted acetones.



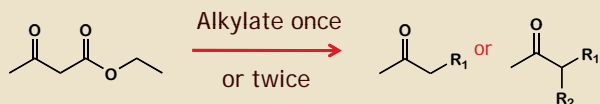
### Malonic Acid Synthesis

A General Method for making substituted acetic acids.



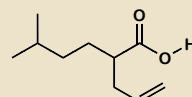
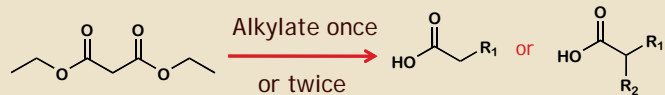
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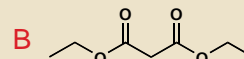
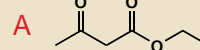


### Malonic Acid Synthesis

A General Method for making substituted acetic acids.

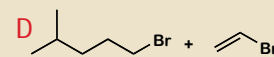
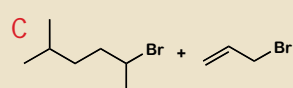
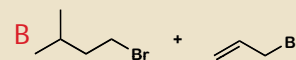
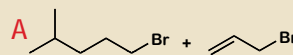


Which starting material would you use?

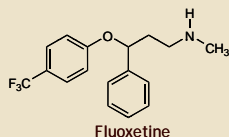


Propose a synthesis

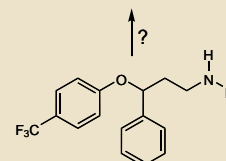
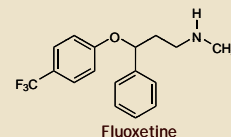
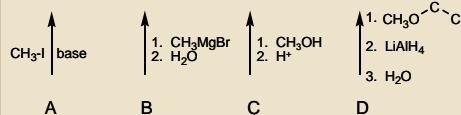
What alkylating reagents would you use?



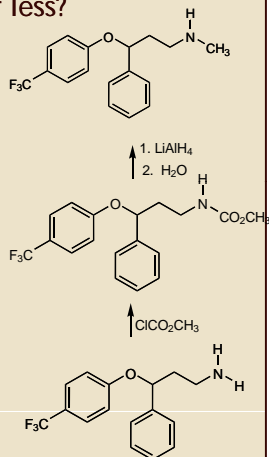
How could Fluoxetine be prepared from benzene and compounds containing 4 carbons or less?



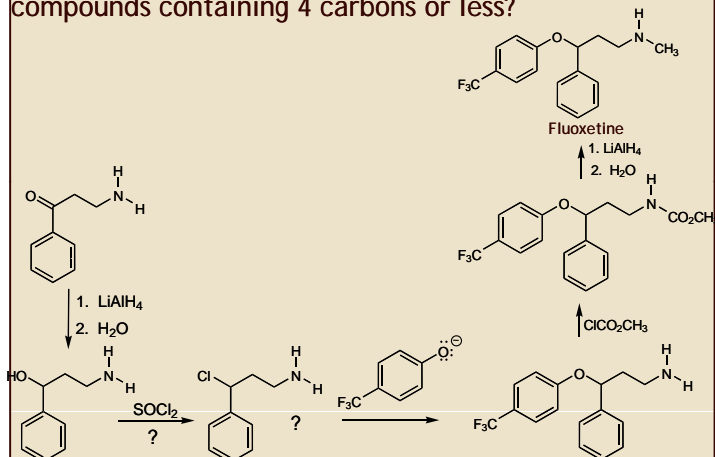
Choose the best method for performing methylation the amine?



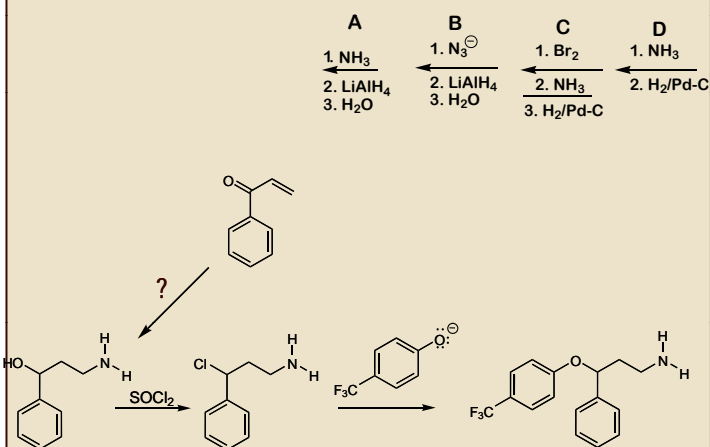
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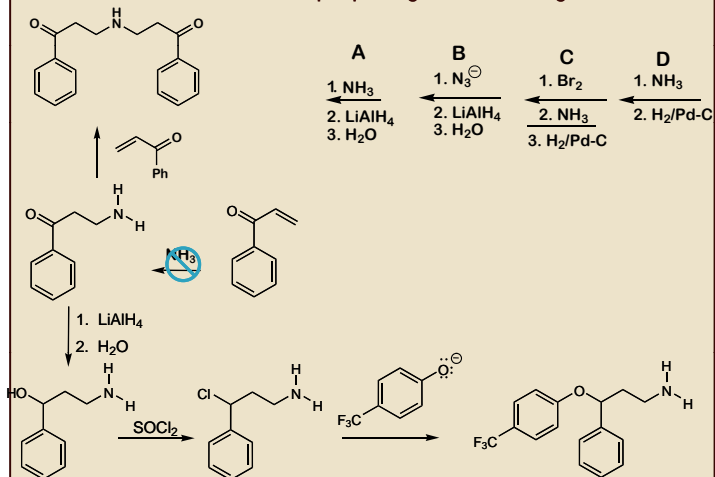
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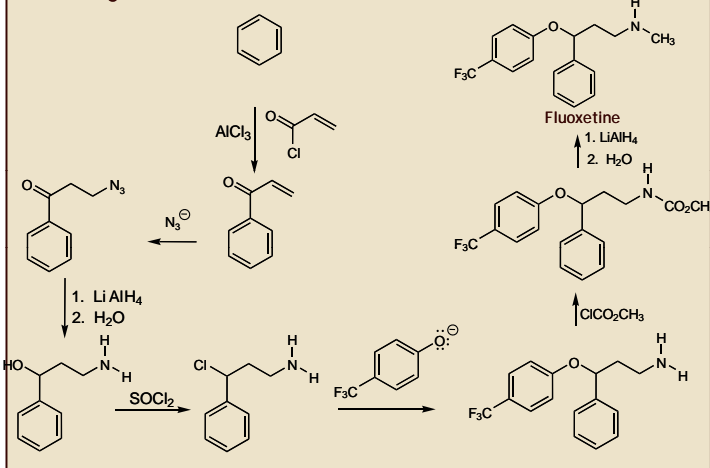
Choose the best method for preparing the following amine?



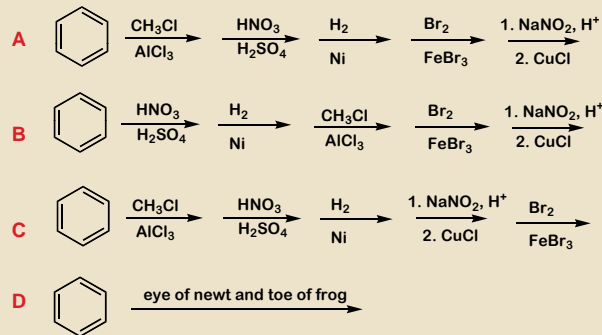
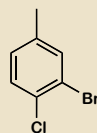
Choose the best method for preparing the following amine?



How could Fluoxetine be prepared from benzene and compounds containing 4 carbons or less?



Propose a synthesis starting from benzene



## Acknowledgements

Dr. Rong Chen  
Professor Frank Fowler

The Graduate TAs  
The Undergraduate TAs

The Discussion Board Participants  
All of you!