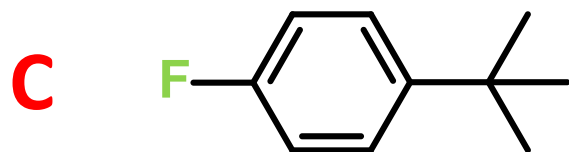
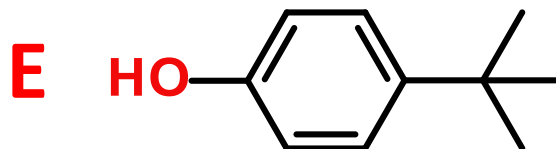
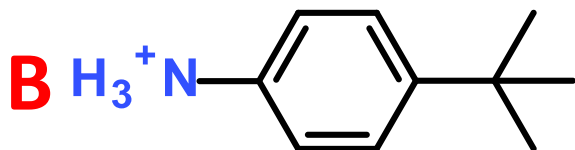
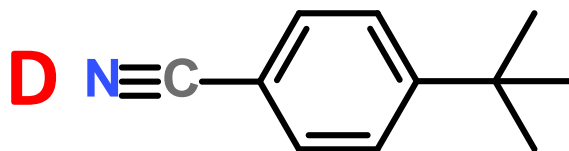
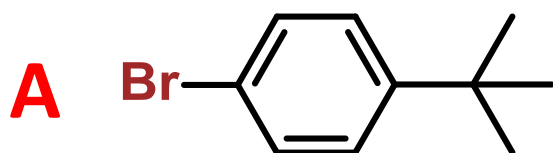
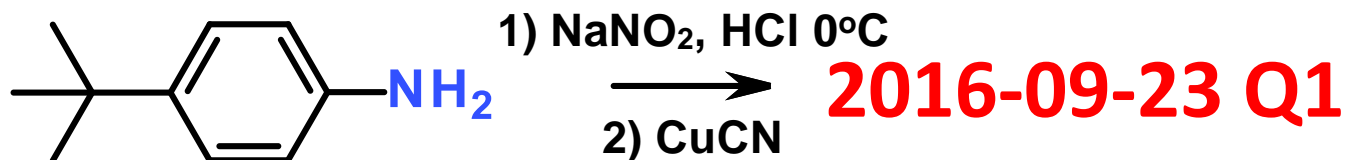
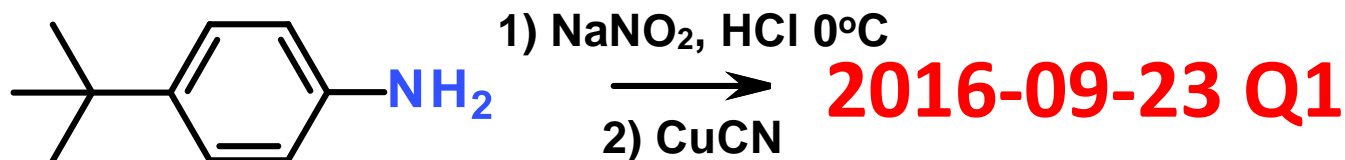


Give the major organic product(s) of the following reaction.

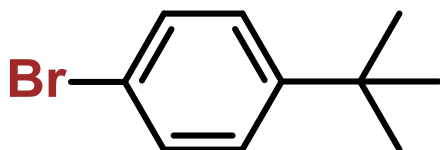


F There is no reaction or the correct product is not listed here.

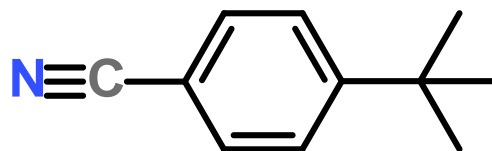
Give the major organic product(s) of the following reaction.



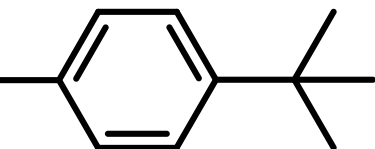
A



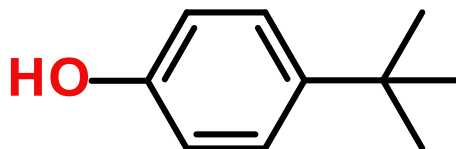
D



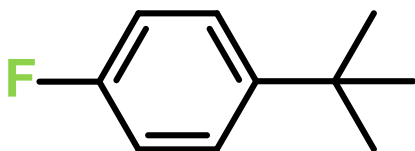
B H₃⁺N



E



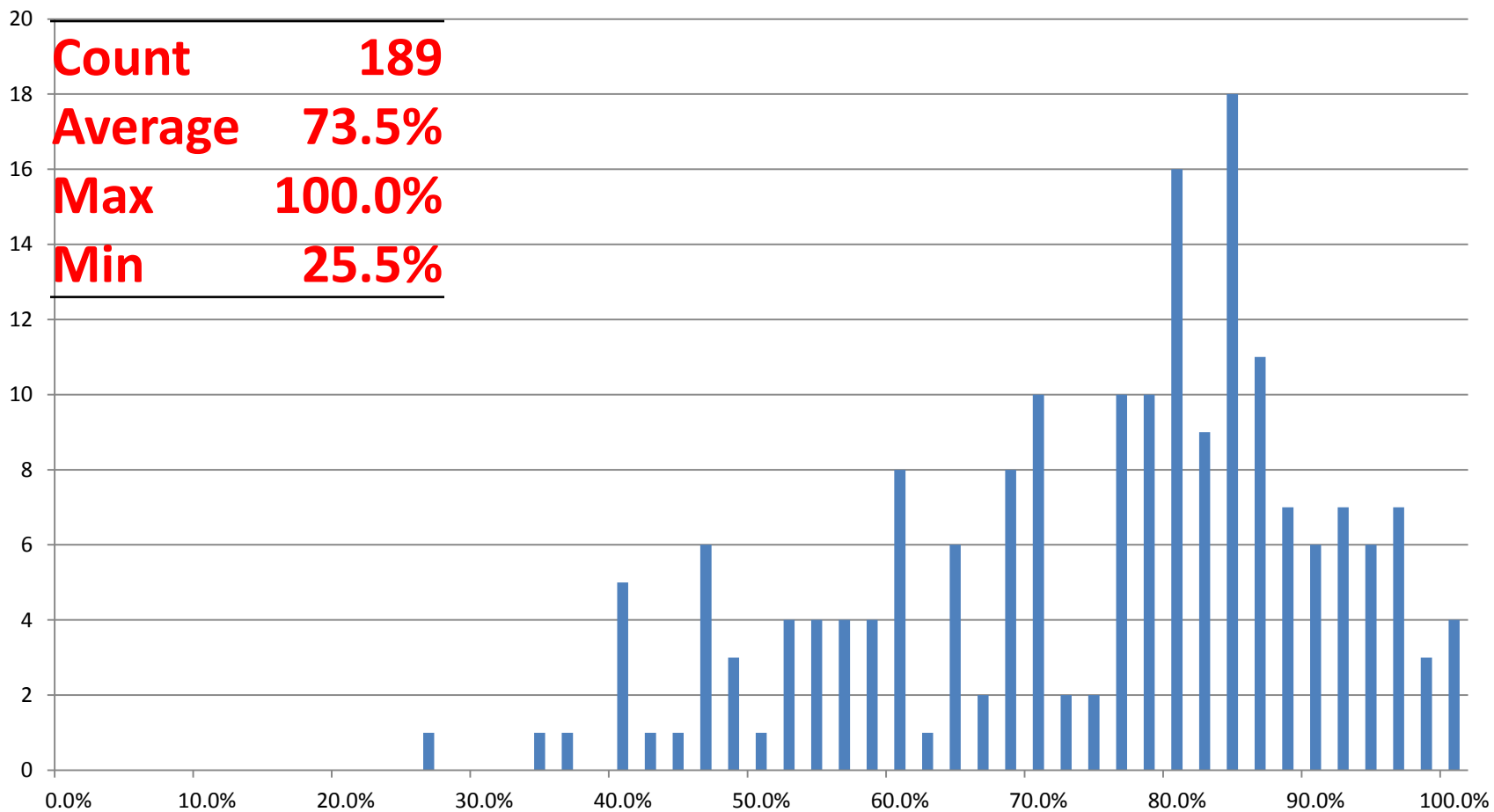
C



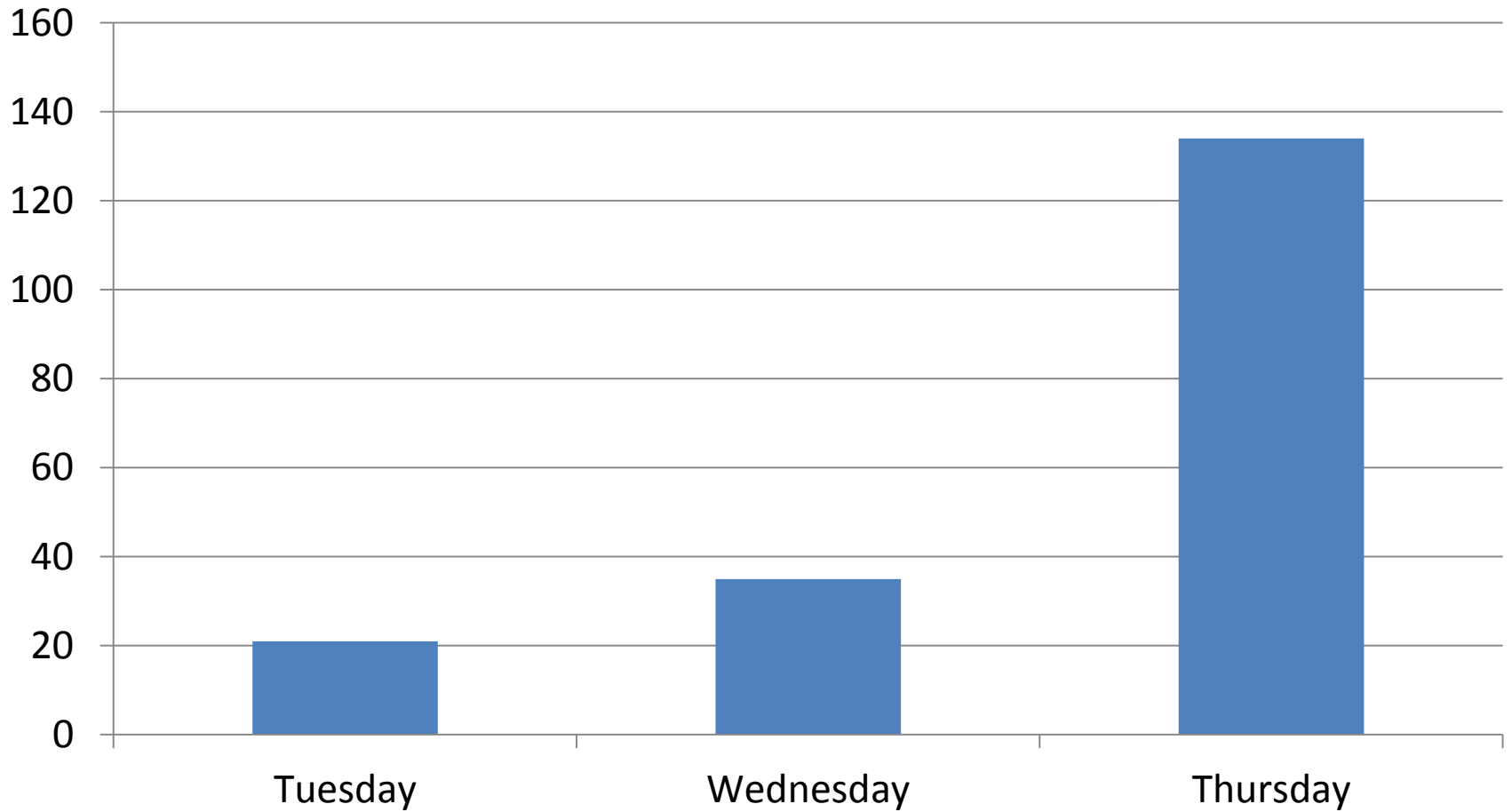
F There is no reaction or the correct product is not listed here.

Chem 234 Exam 1 Fall 2016

Distribution

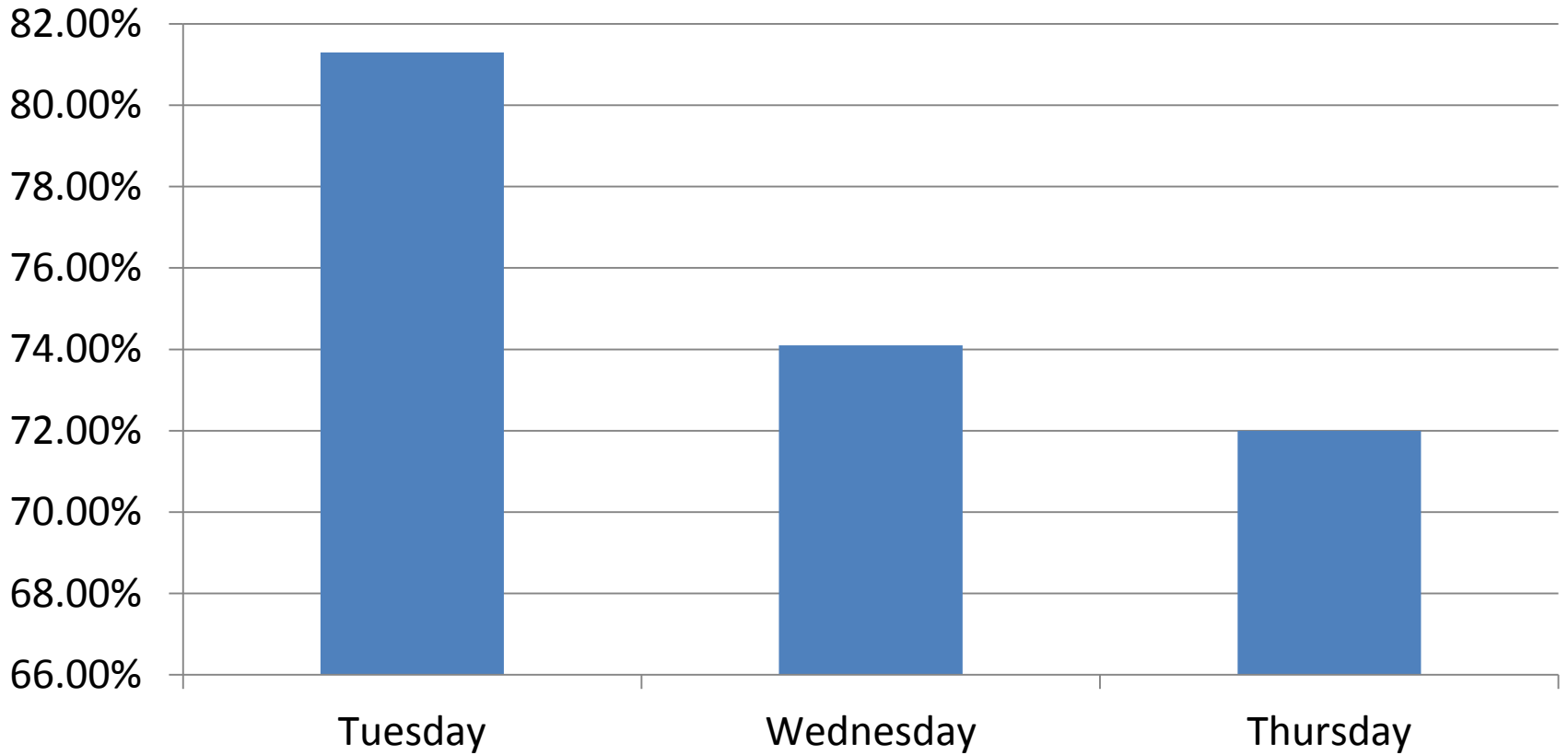


Number of Test Takers



Exam Average

Exam Average



Exam 2

- **Time:**
 - Tuesday, October 18: 7:00 – 9:00PM OR
 - Wednesday, October 19: 7:00 – 9:00PM OR
 - Thursday, October 20: 7:00 – 10:00PM
- **Location – Soc/Anthro Testing Center**
 - Chapters will be covered in this order: Chapter 19, 12
- **Practice Exams are Posted**
 - Ex2-14-98 Practice Exam 2A
 - Ex2-14-98 Practice Exam 2B
- **Deadline for alternate arrangements is Monday, 10/17/2016 at 4:30 PM (i.e., close of business)**
 - An oral make-up exam will be required for making up the exam for all students not taking the exam on the above dates or having already made prior arrangements

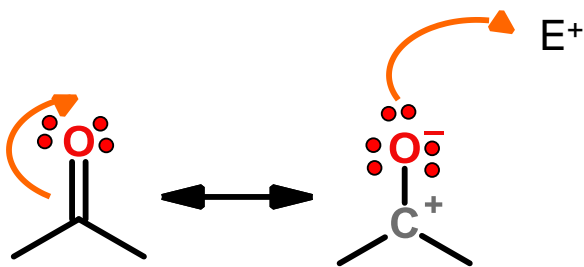
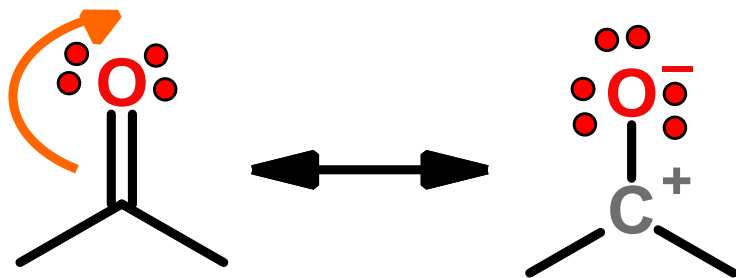
Order of Coverage (Exam 2)

	Homework Assignment	Due Date
1	Ex2-01-B7-19-08A Aryl Side Chain Rxns	Saturday, September 24, 2016
2	Ex2-01-B7-19-08B Aryl Side Chain Rxns	Sunday, September 25, 2016
3	Ex2-02-B7-19-09A Arylamines	Monday, September 26, 2016
4	Ex2-02-B7-19-09B Arylamines	Tuesday, September 27, 2016
5	Ex2-03-B7-12-01A Grignard Rxns	Wednesday, September 28, 2016
6	Ex2-03-B7-12-01B Grignard Rxns	Thursday, September 29, 2016
7	Ex2-04-B7-12-02A Hydride Reductions	Friday, September 30, 2016
8	Ex2-04-B7-12-02B Hydride Reductions	Saturday, October 1, 2016
9	Ex2-05-B7-12-01A Naming Carboxylic Acids	Sunday, October 2, 2016
10	Ex2-05-B7-12-01B Naming Carboxylic Acids	Monday, October 3, 2016
11	Ex2-06-B7-12-02A Prep Carbox Acids	Tuesday, October 4, 2016
12	Ex2-06-B7-12-02B Prep Carbox Acids	Wednesday, October 5, 2016

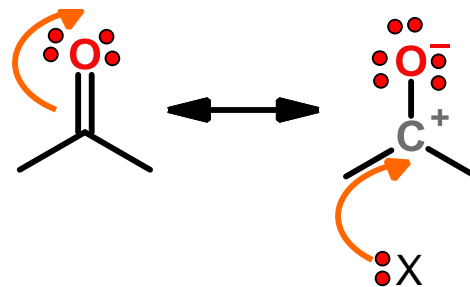
Order of Coverage (Exam 2)

	Homework Assignment	Due Date
13	Ex2-07-B7-12-03A Carbox Acid Rxns	Thursday, October 6, 2016
14	Ex2-07-B7-12-03B Carbox Acid Rxns	Friday, October 7, 2016
15	Ex2-08-B7-12-04A Naming Carbox Acid Derivatives	Saturday, October 8, 2016
16	Ex2-08-B7-12-04B Naming Carbox Acid Derivatives	Sunday, October 9, 2016
17	Ex2-09-B7-12-05A Rxns Acid Chlorides	Monday, October 10, 2016
18	Ex2-09-B7-12-05B Rxns Acid Chlorides	Tuesday, October 11, 2016
19	Ex2-10-B7-12-06A Rxns Esters	Wednesday, October 12, 2016
20	Ex2-10-B7-12-06B Rxns Esters	Thursday, October 13, 2016
21	Ex2-11-B7-12-07A Rxns Amides	Friday, October 14, 2016
22	Ex2-11-B7-12-07B Rxns Amides	Saturday, October 15, 2016
23	Ex2-12-B7-12-08A Step Growth Polymers	Sunday, October 16, 2016
	Exam 2	October 18, 19, 20

Reactions of C=O

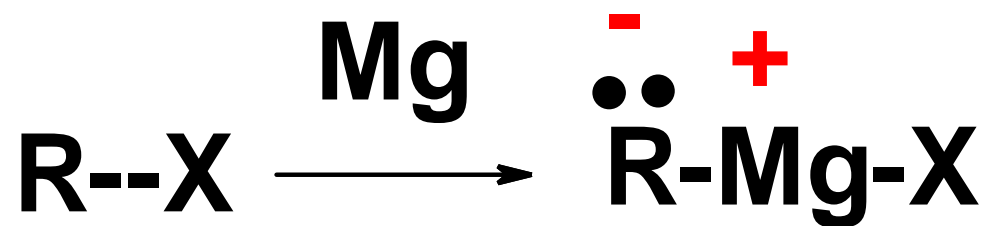


Addition of electrophiles



Addition of nucleophiles

Grignard Reagents



Restrictions: None!

Aryl, vinyl

Tertiary (3°)

Secondary (2°)

Primary (1°)

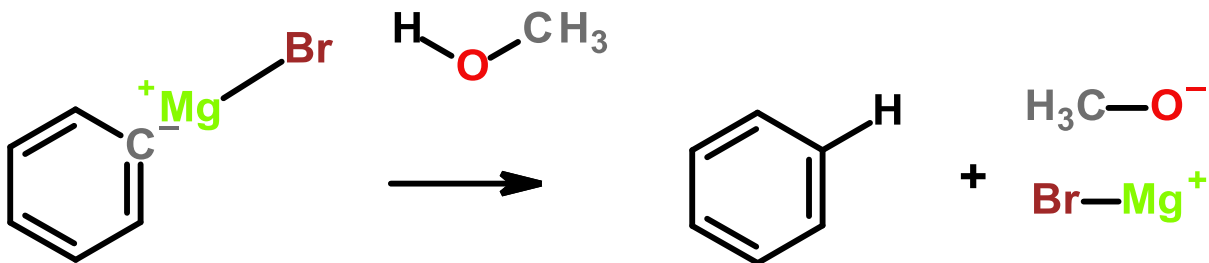
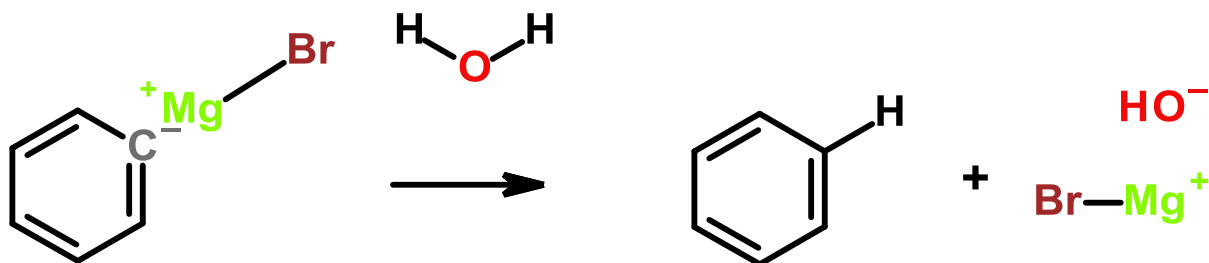
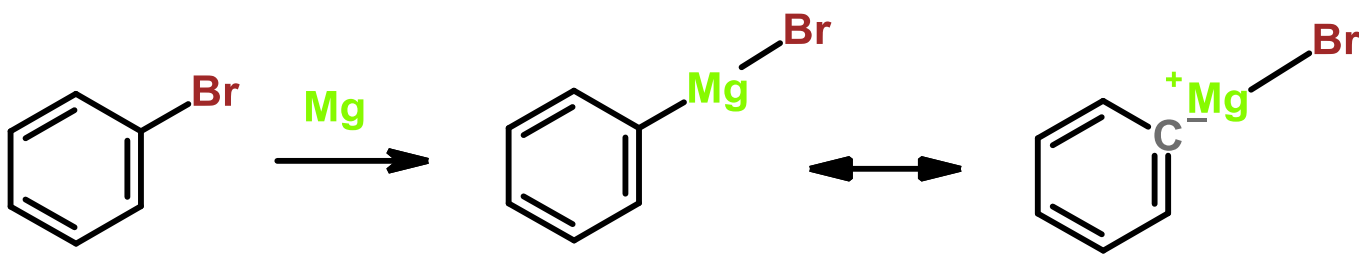
Benzylic, Allylic

All React!!!!

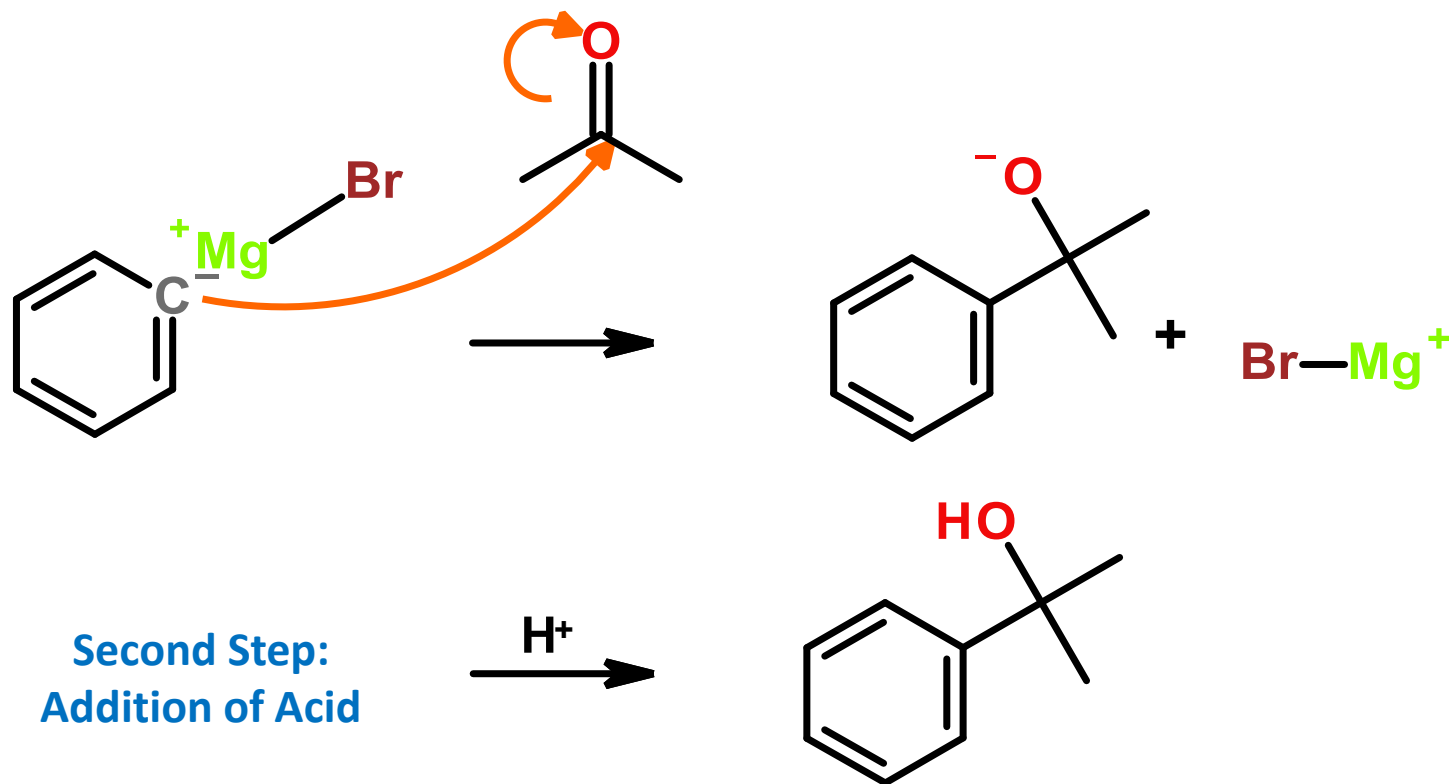
Mostly review from Organic I

Reactions of Grignard Reagents

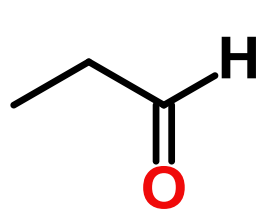
Watch out for N-H or OH!!!! Acid/Base reactions are always faster than anything else!



Grignard Reactions with Aldehydes or Ketones



Give the major organic product(s) of the following reaction.

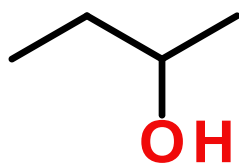


1) $\text{CH}_3\text{CH}_2\text{MgBr}$

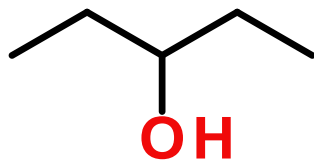


2) H_3O^+

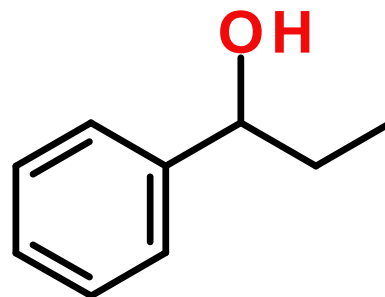
2016-09-23 Q5



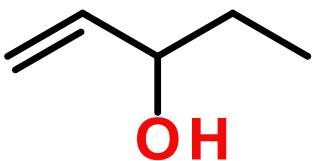
A



B



C



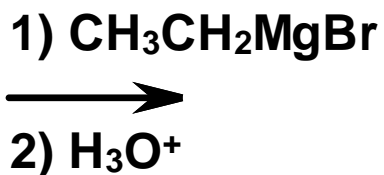
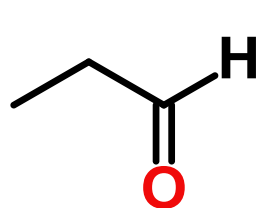
D



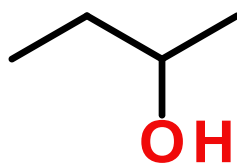
E

F. There is no reaction or the correct product is not listed here.

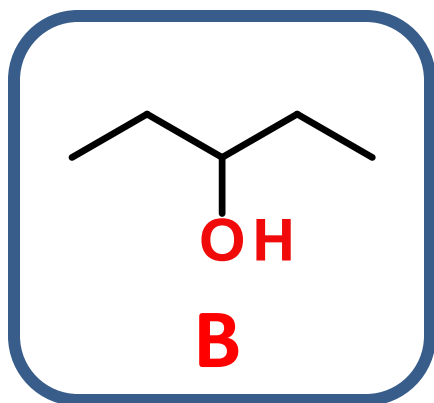
Give the major organic product(s) of the following reaction.



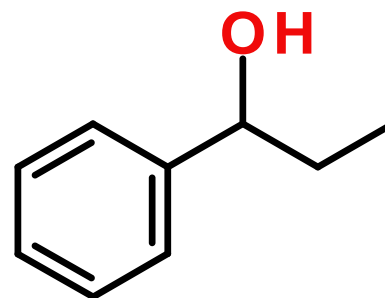
2016-09-23 Q5



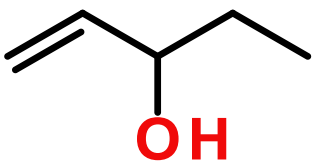
A



B



C



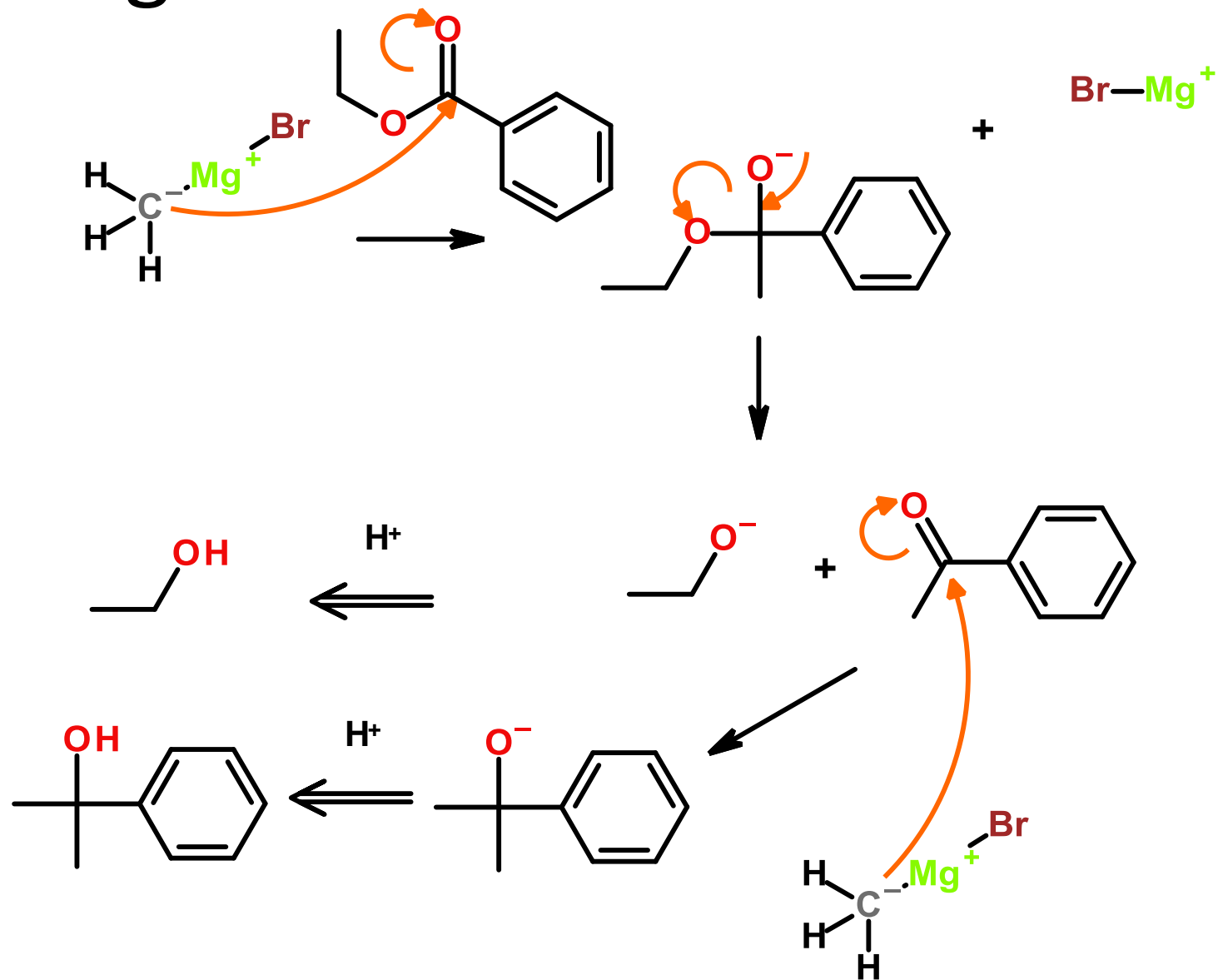
D



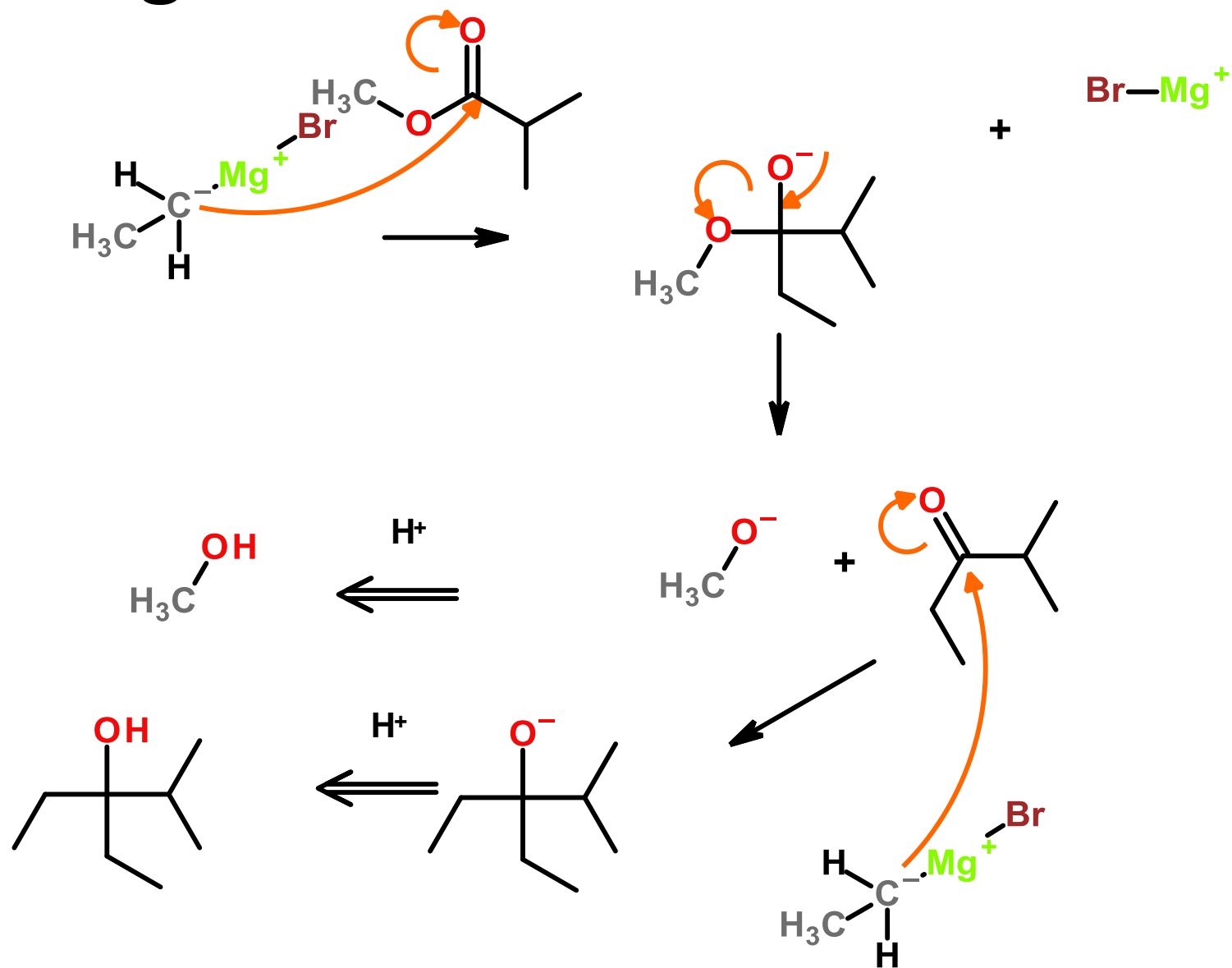
E

F. There is no reaction or the correct product is not listed here.

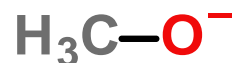
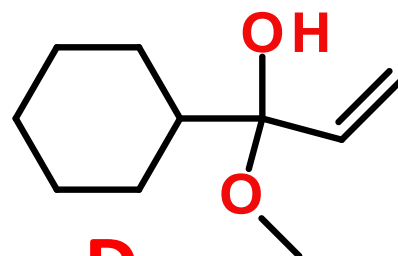
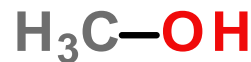
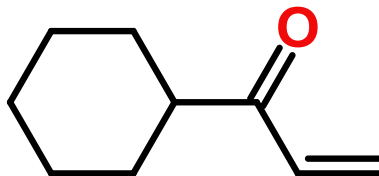
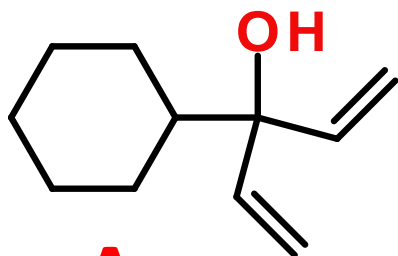
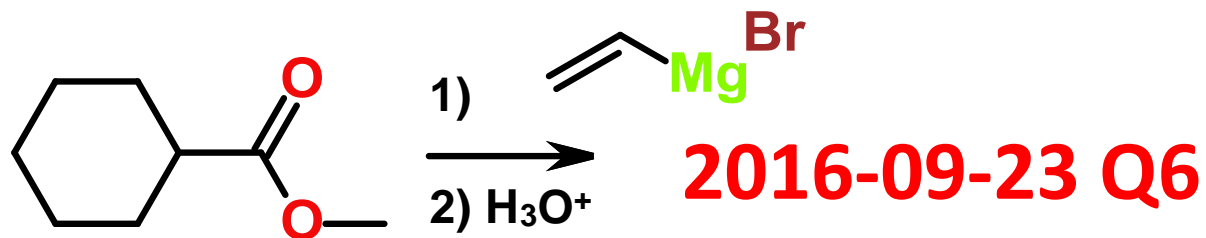
Grignard Reactions with Esters



Grignard Reactions with Esters

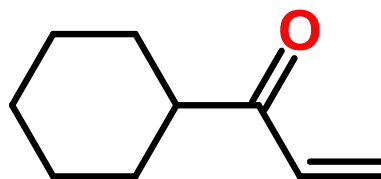
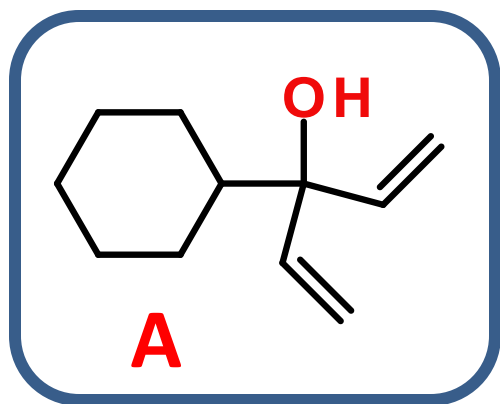
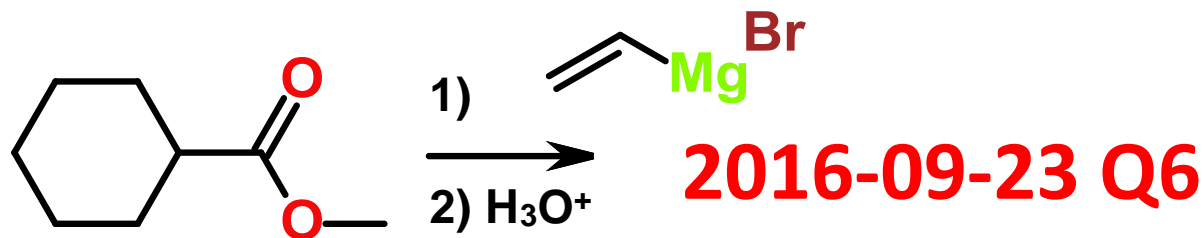


Give the major organic product(s) of the following reaction.

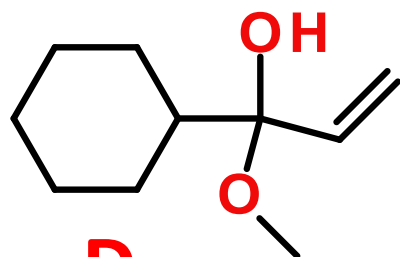
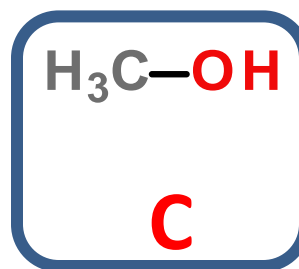


G. There is no reaction or the correct product is not listed here.

Give the major organic product(s) of the following reaction.



B



D



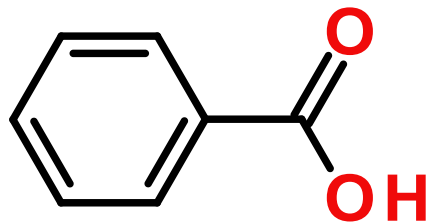
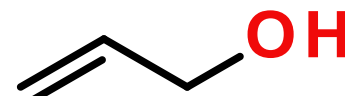
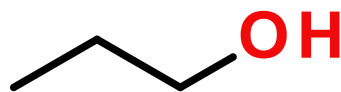
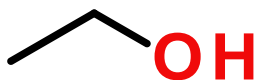
E



F

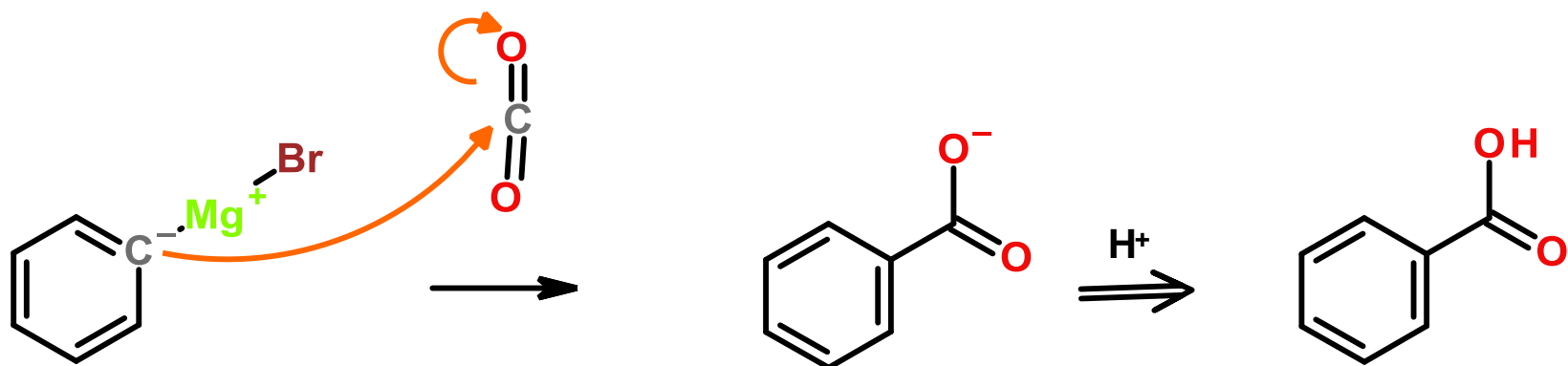
G. There is no reaction or the correct product is not listed here.

Give the major organic product(s) of the following reaction.

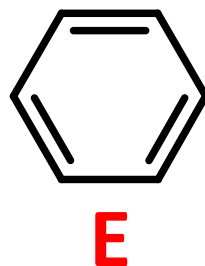
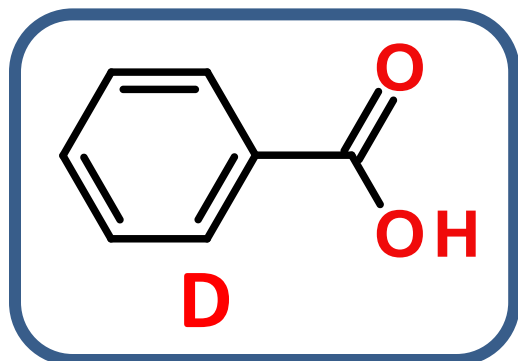
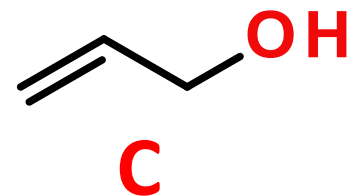
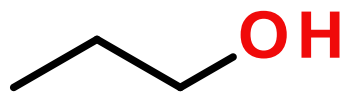
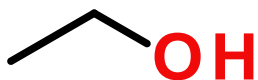


F. There is no reaction or the correct product is not listed here.

Explanation

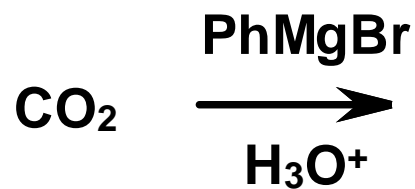


Give the major organic product(s) of the following reaction.

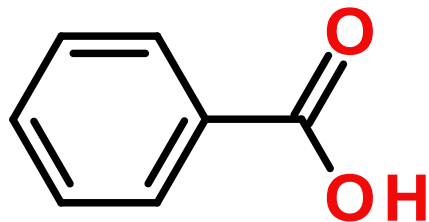
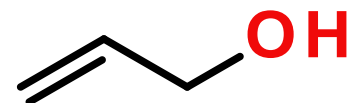
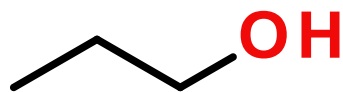
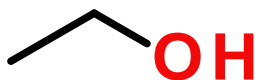


F. There is no reaction or the correct product is not listed here.

Give the major organic product(s) of the following reaction.

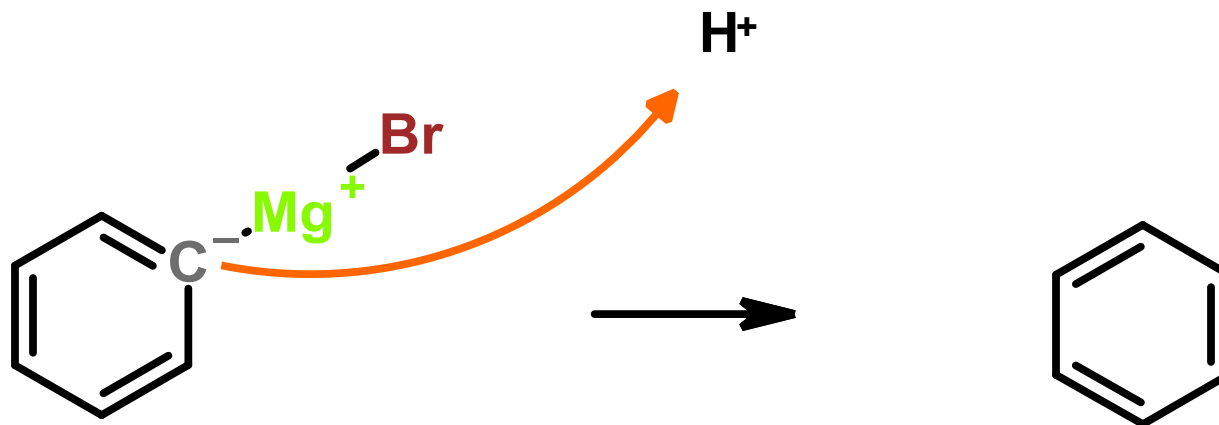


2016-09-23 Q7

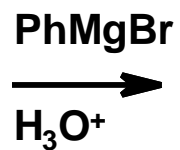


F. There is no reaction or the correct product is not listed here.

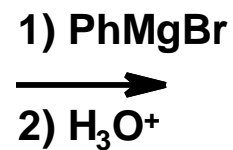
Explanation



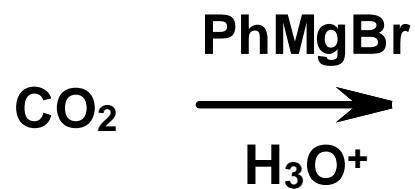
Note the difference in reagents and conditions



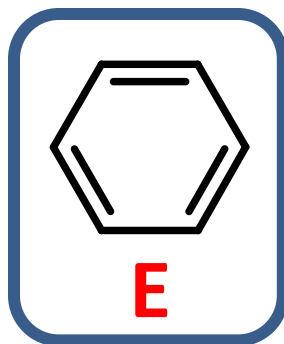
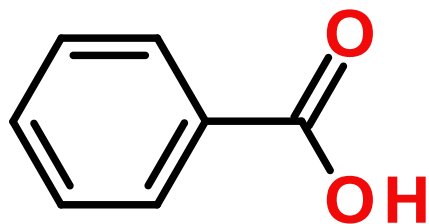
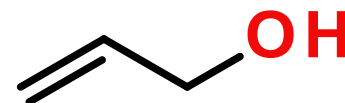
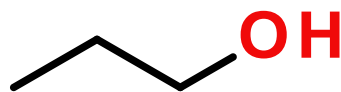
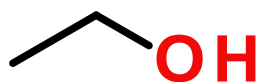
is not the same as



Give the major organic product(s) of the following reaction.

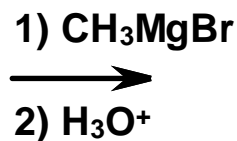
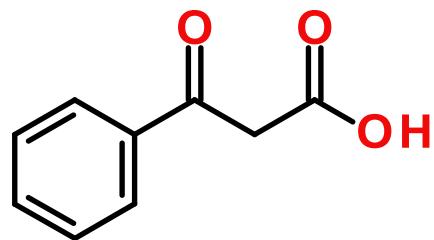


2016-09-23 Q7

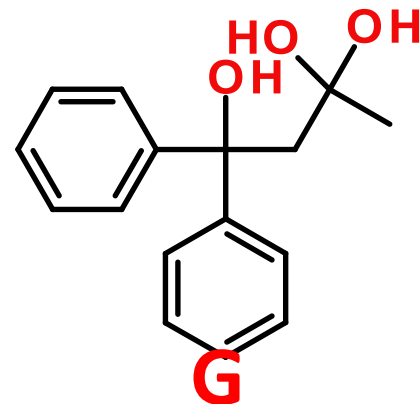
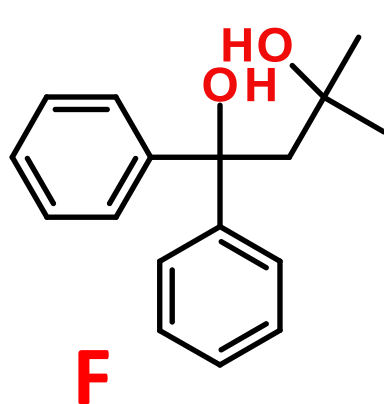
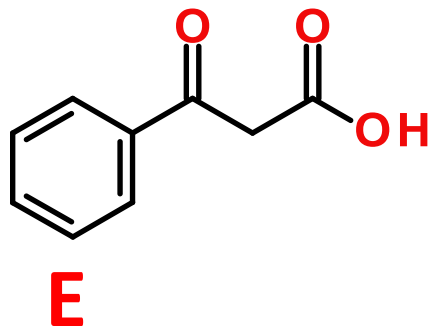
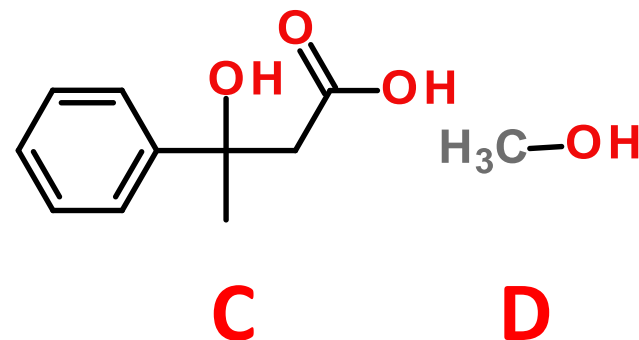
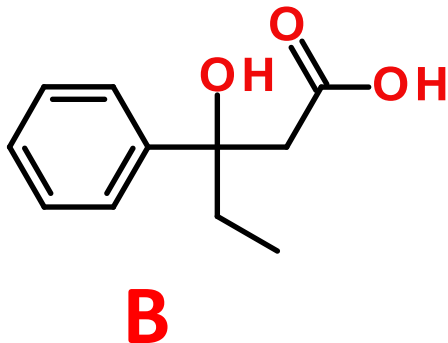
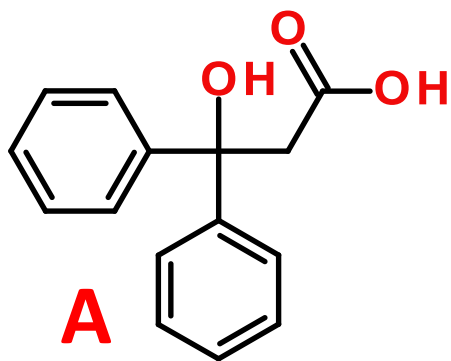


F. There is no reaction or the correct product is not listed here.

Give the major organic product(s) of the following reaction.

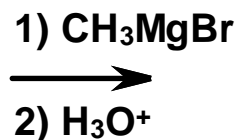
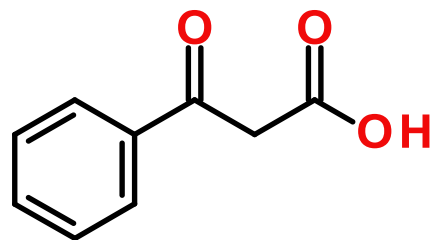


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H

Give the major organic product(s) of the following reaction.



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