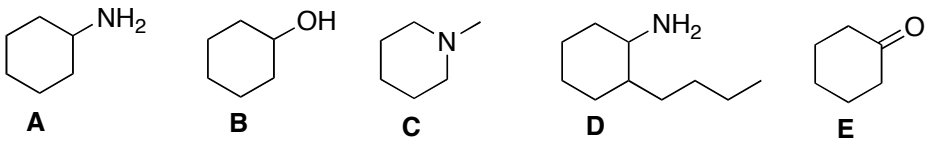
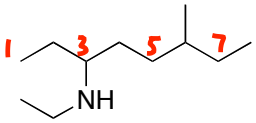
Chem 342 Jasperse Due: Name: Answers
Ch. 24 Amines

1. Solubility/Boiling point problem. Which of the following statements is **false**?

a. The water solubility of **A** is greater than for **B**, because amines are more basic and thus hydrogen bond better with water.
b. The boiling point of **B** is greater than for **A**, because alcohols are more acidic and thus hydrogen bond better with themselves.
c. The relative boiling points should be **D > A > C**
d. The relative water solubilities should be **D > A > C**
e. Structures **C** and **E** can hydrogen bond to water, but neither can hydrogen-bond to itself

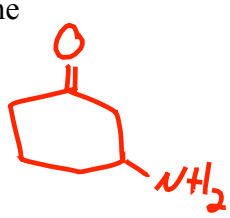


2. Name the following:

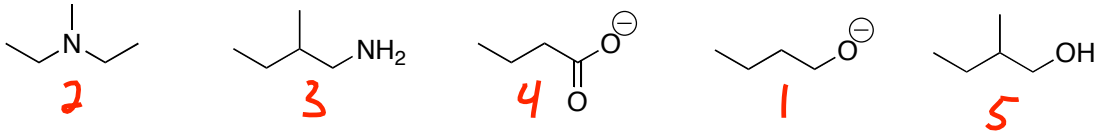


N-ethyl-6-methyloctan-3-amine

3. Draw the structure for 3-aminocyclohexanone

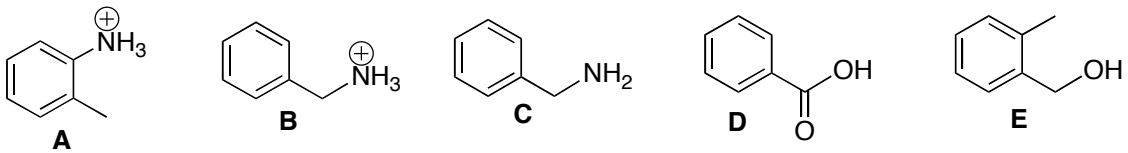


4. Rank the **basicity** of the following from 1 to 5, 1 being highest.



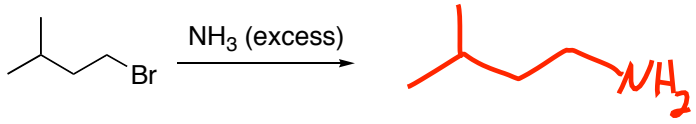
5. Which of the following statements is **false** regarding the acidities of structures **A-E**:

a. In terms of acidity, **A > B > C**
b. In terms of acidity, **D > B > E**
c. In terms of acidity, **E > B**

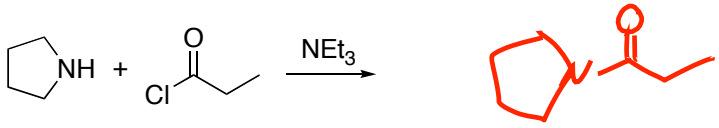


Predict the Products for the Following Reactions

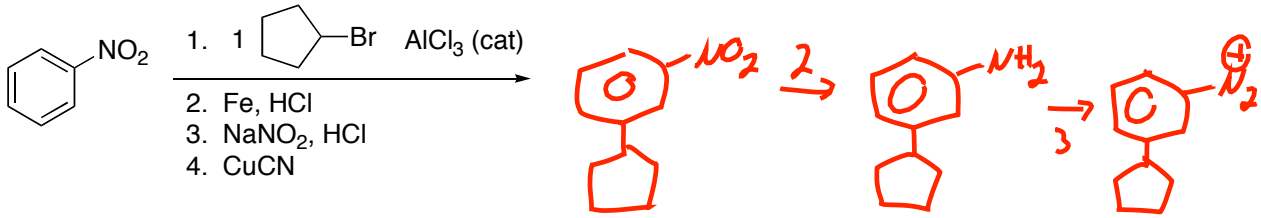
6.



7.



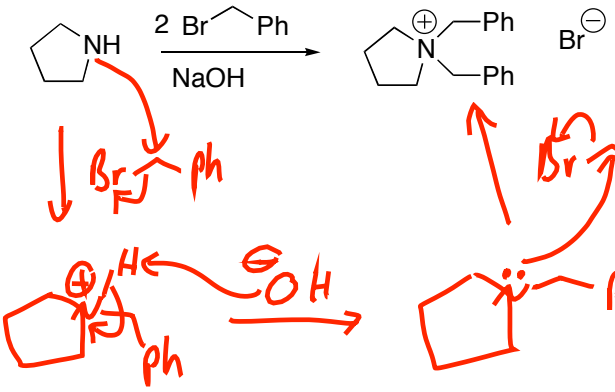
8.



Depending on the semester, you may not be responsible for this reaction

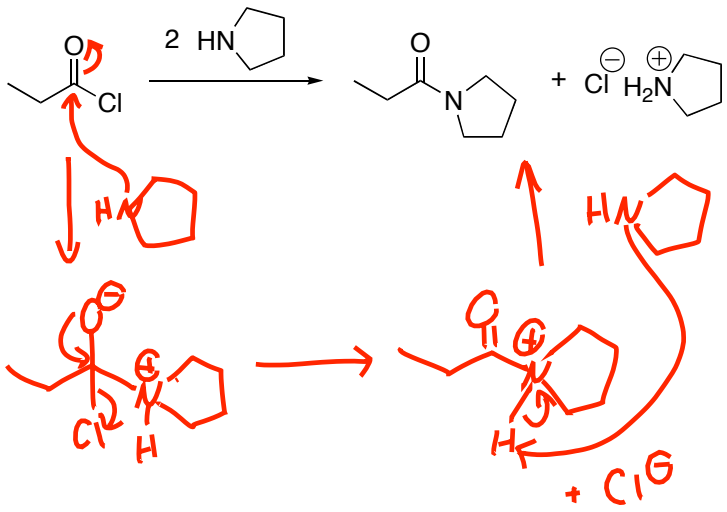
Draw the mechanism for the following reactions.

9.



1. SN2
2. Deprotonate
3. SN2

10.



1. Addition
2. Elimination
3. Deprotonation