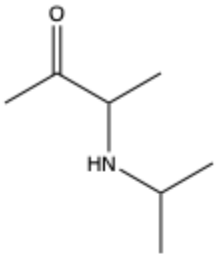
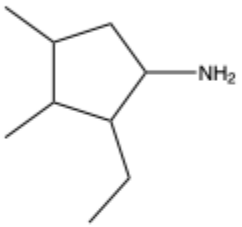
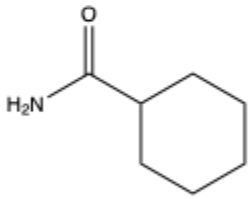
CHEM 2300 Session 12

1. Name/Draw the following nitrogen compounds





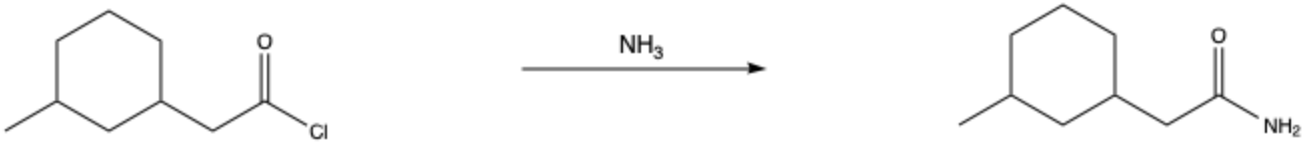


3-methylbutanamide

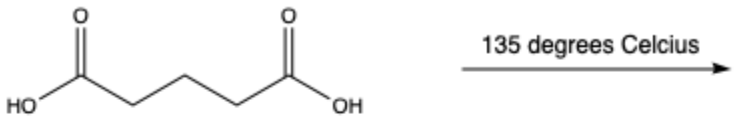
N,4-diethylaniline

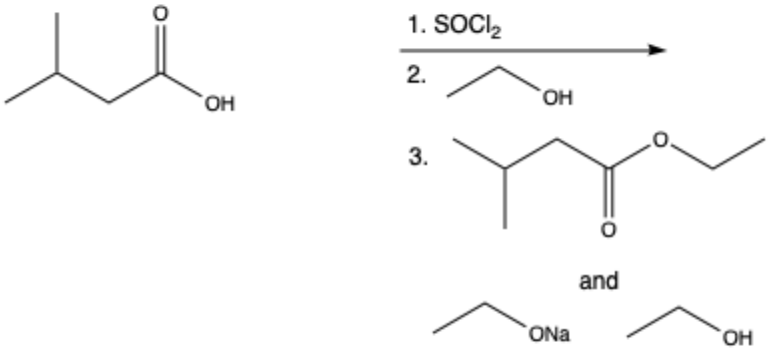
2. Show the general mechanism for carboxylic acid reactions (assume weak nucleophile)

3. We do the following reaction below but end up getting a compound that is soluble in water unlike our desired product, why do you think that is? How might we get the product shown below? Draw a mechanism

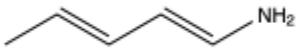


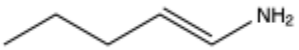
4. Give the major product for the following reactions





5. Which compound is more basic and why? Use resonance structures to explain answer





6. How might we synthesize the following molecule from benzene? Give a synthetic route