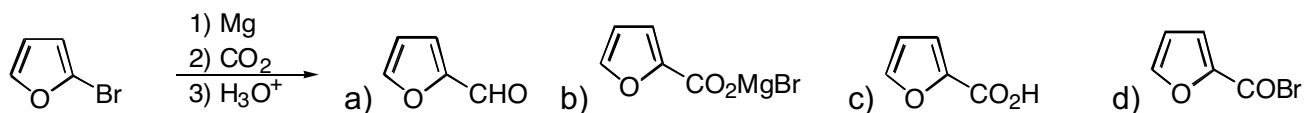
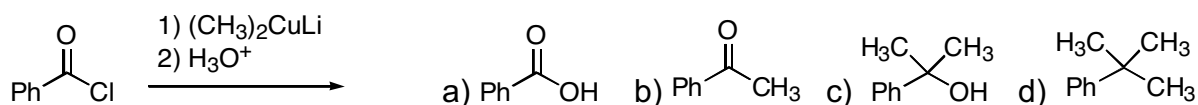


21 points (3 points each) Mark your answers on the scantron sheet. You may keep this copy.

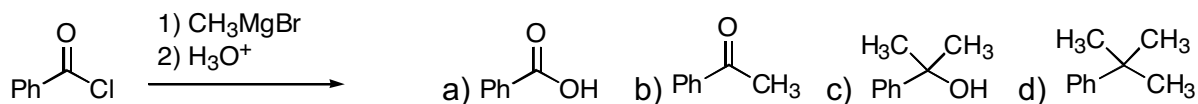
1. What is the product of the following reaction sequence?



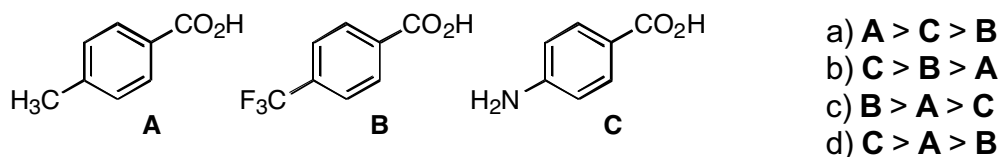
2. What is the product of the reaction of benzoyl chloride with dimethyl cuprate?



3. What is the product of the reaction of benzoyl chloride with methyl magnesium bromide?



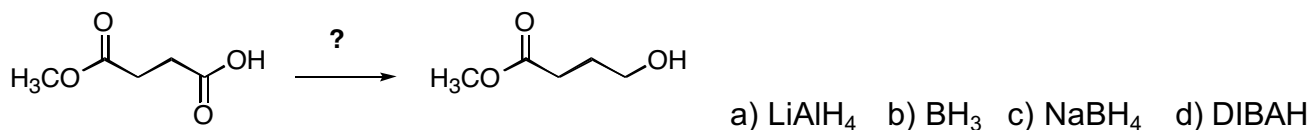
4. Rank the following molecules in order of acidity with the most acidic first.



5. Which of the following molecules is not at the same oxidation state as a carboxylic acid?



6. Which reducing agent would you use to carry out the following reduction?



7. Which of the following cannot be easily made directly from the carboxylic acid?

