

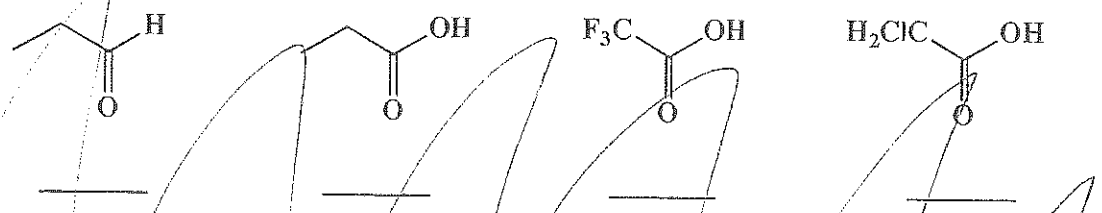
C, D, F

Signature \_\_\_\_\_

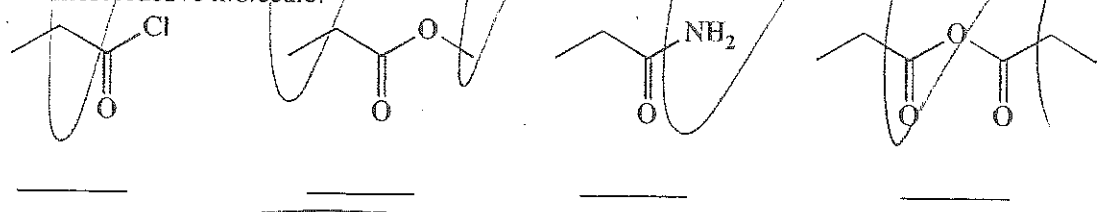
Pg 5 \_\_\_\_\_ (24)

7 (4 pts each) For the following, rank the molecules according to the directions given.

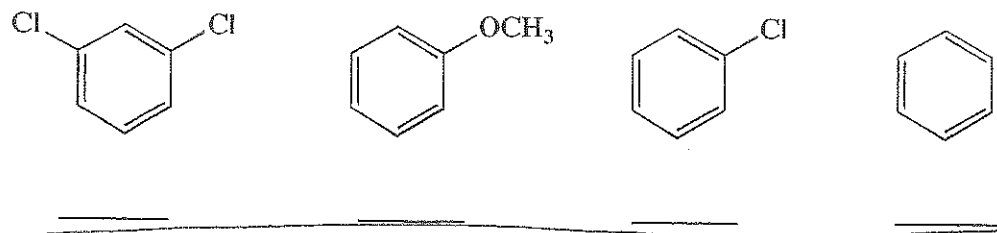
A. Rank from least to most acidic, with a 1 under the least acidic and a 4 under the most acidic molecule.



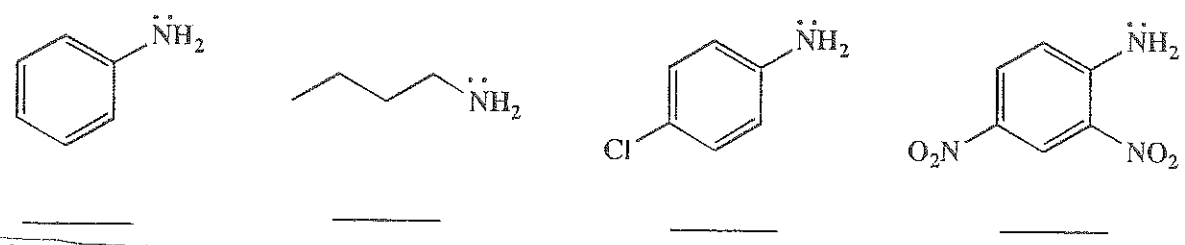
B. Rank from least to most reactive with nucleophiles, with a 1 under the least reactive and a 4 under the most reactive molecule.



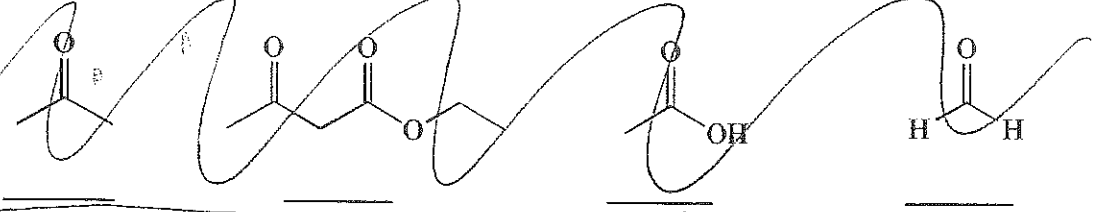
C. Rank from least to most reactive with wicked strong electrophiles, with a 1 under the least reactive and a 4 under the most reactive molecule.



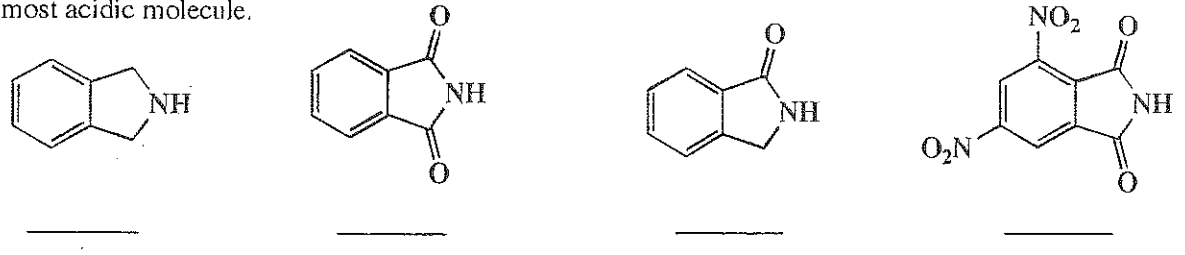
D. Rank from least to most basic, with a 1 under the least basic and a 4 under the most basic molecule.

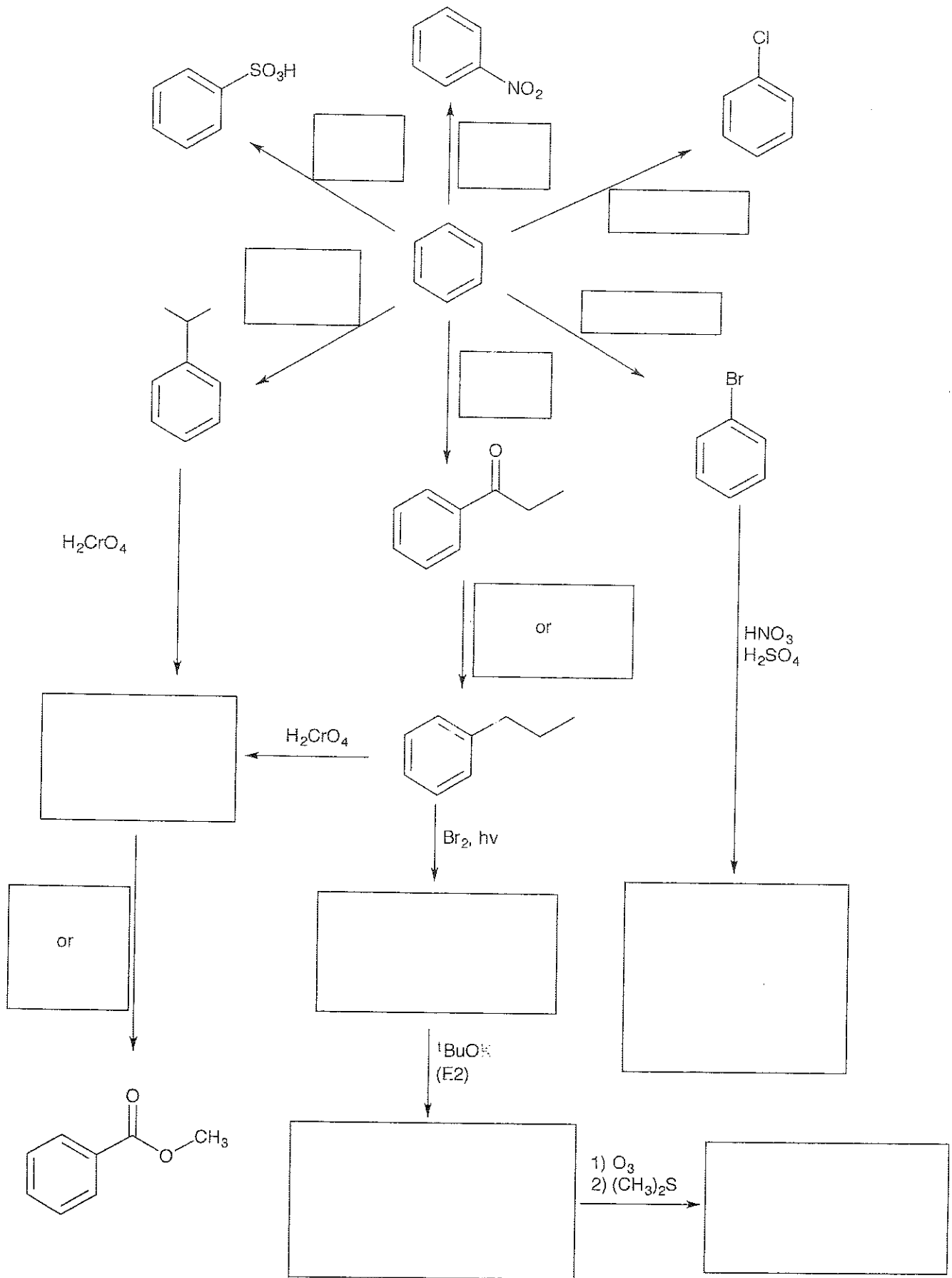


E. Rank from least to most acidic, with a 1 under the least acidic and a 4 under the most acidic molecule.

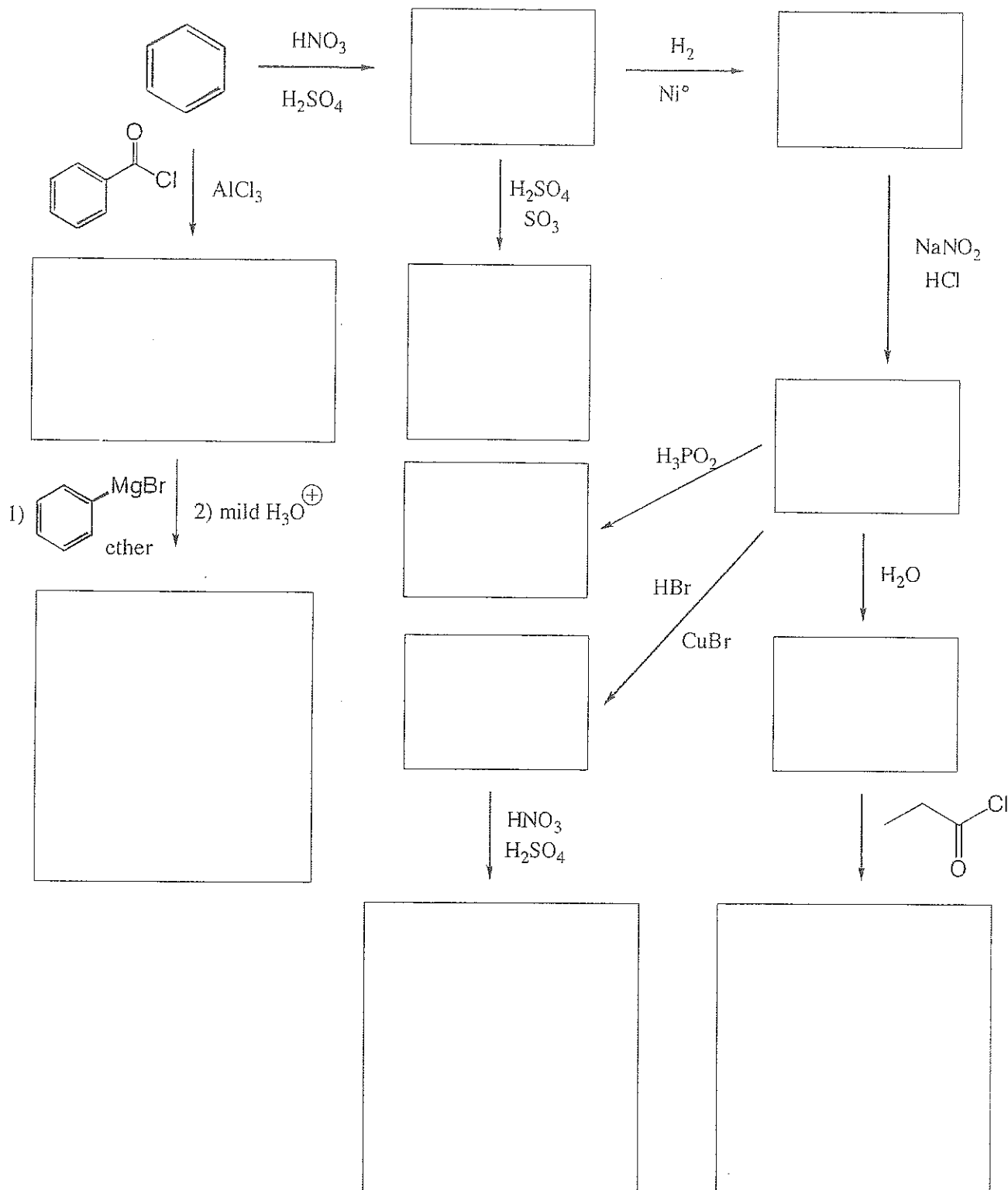


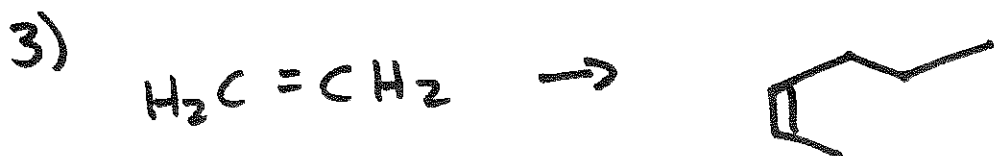
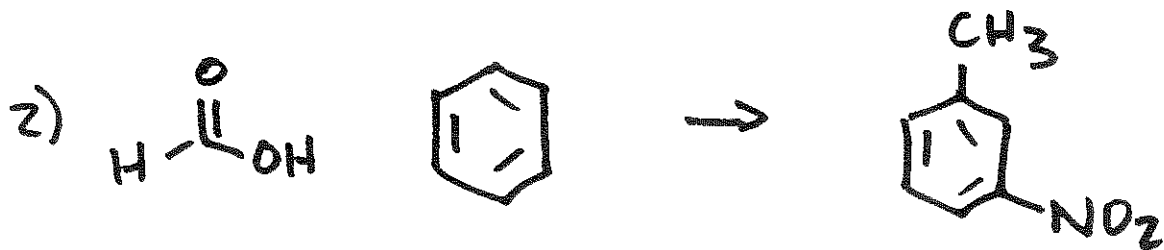
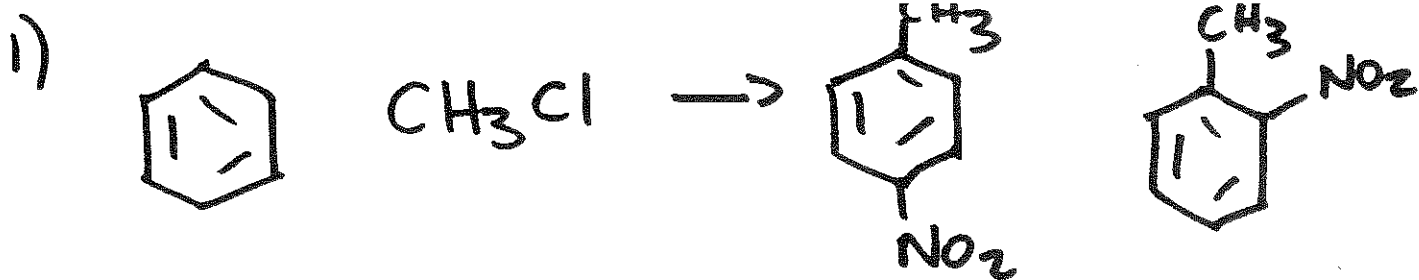
F. Think this through!! Rank from least to most acidic, with a 1 under the least acidic and a 4 under the most acidic molecule.






12. (34 pts.) Write the predominant product or products that will occur for each transformation. Assume each reagent only adds once to the ring. If predominantly ortho/para products are predicted, you must draw both.





4)



- 1)  $\text{Br}_2 / \text{FeBr}_3$
  - 2)  $\text{Mg} / \text{ether}$
  - 3)  $\text{CO}_2$
  - 4) mild  $\text{H}_3\text{O}^+$
- 
- 5)  $\text{SOCl}_2$
  - 6)  ,  $\text{AlCl}_3$
  - 7)  $\text{NH}_2\text{NH}_2$  ,  $\text{NaOH}$