

Friday Worksheet

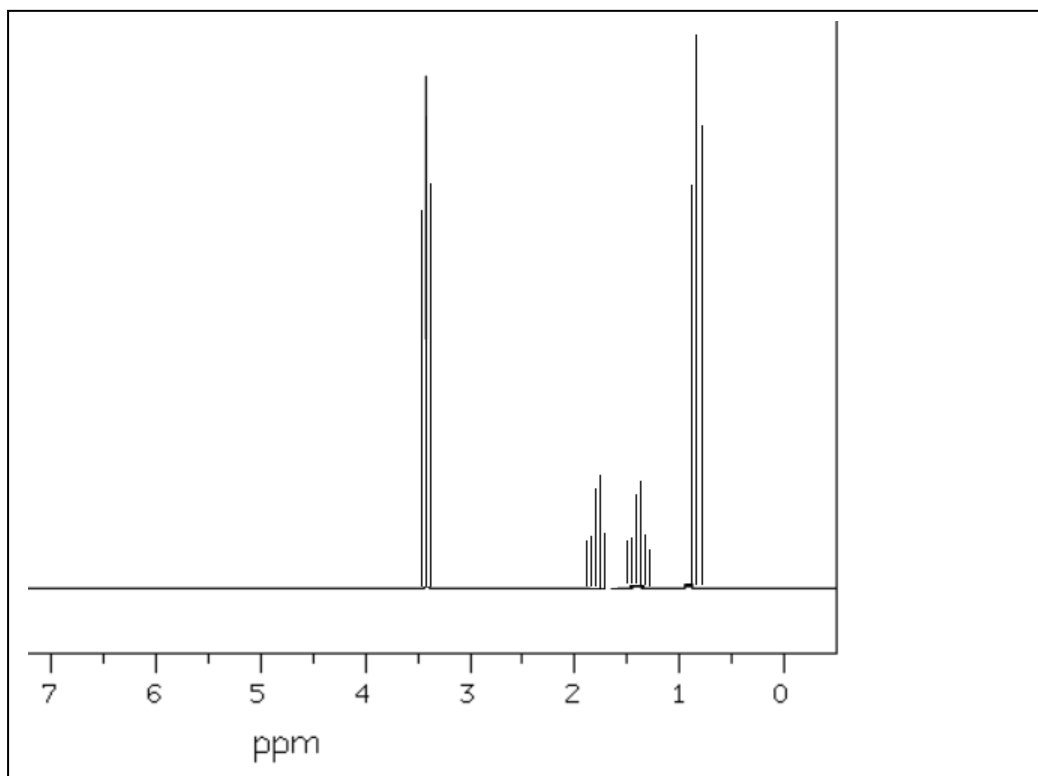
Name:

Organic worksheet 4

- 1) An alkene with the molecular formula C_4H_8 reacted with HCl according to the equation below.

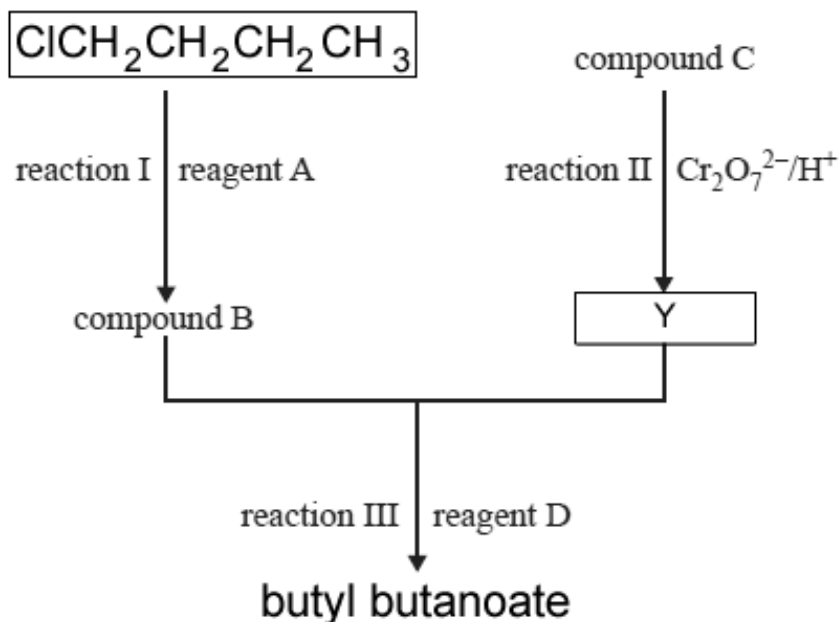


- a) Give the semi-structural formulae and the systematic names of all the possible isomers of X.



- b) Above is the 1H NMR of X. Identify the isomer and draw its structural formula.

2) The reaction pathway shown below produces butyl butanoate



- What is reagent A?
 - What is the systematic name of compound B?
 - What is the systematic name for compound C?
 - What type of reaction is reaction III?
 - What is the systematic name of compound Y?
 - What is reagent D?
 - What type of reaction is reaction I?
 - What type of reaction is reaction II?
- 3) Which of the following statements would apply to compounds that belong to the same homologous series? Give examples
- they have similar physical properties
 - they have similar chemical properties
 - they contain the same functional group
 - they have the same molecular formula but different structures