

Power Point Study– 07-3Substitution Reactions SN1 **Name:**

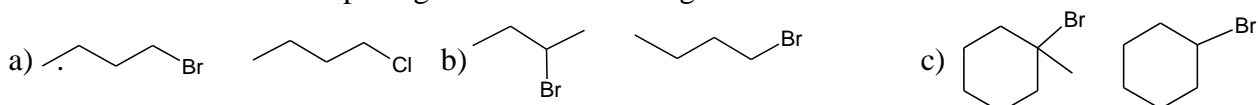
For S_N1 – need 3° substrate, good leaving group, weak Nu^- or even the solvent, e.g. H_2O , CH_3OH etc can be the Nu^- (solvolysis)

1) Use the equation below to answer the questions below.

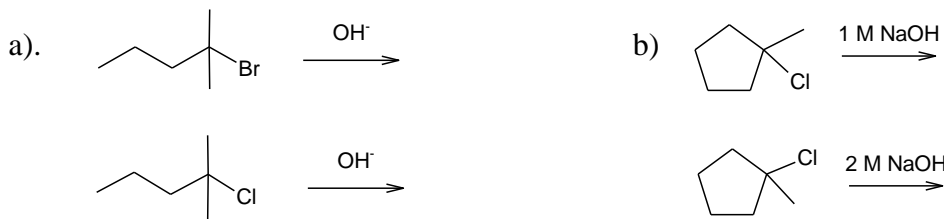
$$\text{Rate} = k [A]^0 [B]^1$$

- What is the order of reaction?
- What is the order of reaction with respect to B?
- What will happen to the rate of reaction if the concentration of A is doubled?

2) Circle the substrate in the pairs given that will undergo S_N1 faster.



3) Which of the following S_N1 reactions will go faster in each of the pairs?



4) Write the missing substrate, product or nucleophile in the following reactions.

