CONCEPT: INTRAMOLECULAR NUCLEOPHILIC CATALYSIS

- Intramolecular nucleophilic catalysis is a form of _____ group participation (NGP).
 - □ **NGP:** change in reaction _____ and _____chemical outcome of a reaction due to a neighboring group.

Intramolecular Nucleophilic Catalysis					
Reaction					Relative Rate
CH ₃	+	$\overline{N_3}$	_	CH ₃	
H ₃ C S - Ph	+	$\overline{N_3}$	-	H ₃ CS-Ph	
H ₃ C S Ph		→	N_3	H ₃ C S−Ph	

EXAMPLE: The following two compounds react with methanol to yield substitution products. Identify the compound that will react at a considerably faster rate than the other.

PRACTICE: The following compound has two stereoisomers. One isomer reacts with acetate more than a billion times faster than the other. Draw the structure of that isomer and write a plausible reaction mechanism.