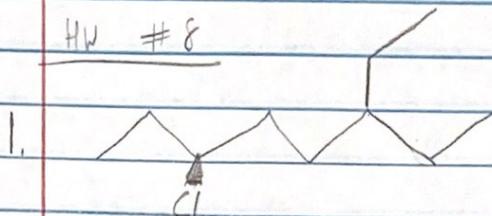


A'Yonah Lucas

Oct. 7, 2020

Org. Chem

HW #8



2. a. 1-bromopentane

b. 2-bromobutane

3. NH_3

$\text{CH}_3\text{CH}_2\text{OH}$

CH_3Cl

4. Protic Solvent: $\text{I}^- > \text{Br}^- > \text{Cl}^- > \text{F}^-$

Aprotic Solvent: $\text{F}^- > \text{Cl}^- > \text{Br}^- > \text{I}^-$

Hydrogen bonding solvents invert nucleophilicity. In polar protic solvents, nucleophilicity increases as you go down the periodic table. In polar aprotic solvents, the order is reversed, & the most basic nucleophiles are also the most nucleophilic.

