
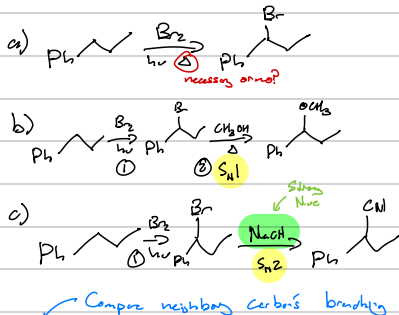




Ph =  for my own sake

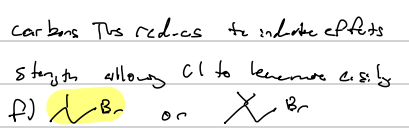
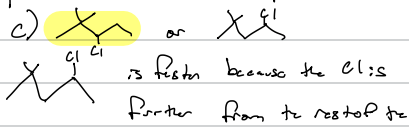
Ch6 HW - 6-30; 6-33b, c, f; 6-34 a, d, f; 6-37; 6-41, 6-42; 6-43; 6-45c, d, h; ; 6-46e; 6-49, 6-50

6-30 

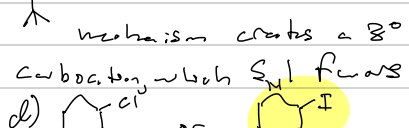
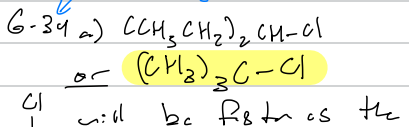


6-33b)  or 

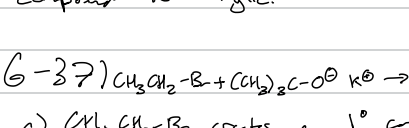
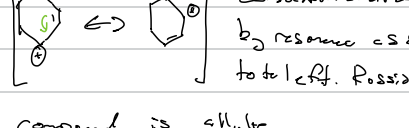
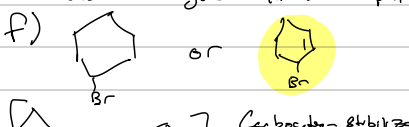
I would be a better leaving group as it has a softer external orbitals is more polarizable than Cl. It is preferred here



Solvolysis in ethanol = S_N1



I is a better leaving group so its molecule undergoes S_N1 more rapidly.



a) CH_3CH_2-Br creates a 1° carbocation which is favored by S_N2. This is second order, and the reaction rate doubles if CH_3CH_2-Br doubles.

b) Rate = $k_1[CH_3CH_2-Br][CH_3)_2C=O]$
 $3 \times 2 \times 6$ so rate is increased by a factor of 6.
 c) Increasing temperature increases overall reaction rate.

