Review



Example 1





Example 2





Example 4







- between different molecules = **inter**molecular reaction



- within one molecule = **intra**molecular reaction

- the reaction for 5-membered ring is faster ($\sim 10, 000 \times$ faster) than a 6-membered ring



Example 7









To avoid side reactions, H_2SO_4 is commonly used



The above reaction is the synthesis of alcohol, The reverse is an Elimination (of water) for the synthesis of alkene

