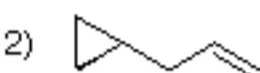
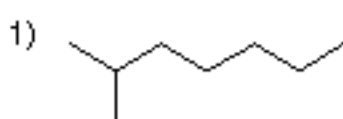


# Multi-Step Synthesis Problems 1

For each compound shown below, using compounds of four carbons or fewer:  
(a) diagram a retrosynthetic analysis (work backwards)  
(b) provide a detailed (reagents, etc) pathway in the synthetic (forward direction)



note: selective reactions (hoping that only one alkene will react when 2 are present) are often difficult

