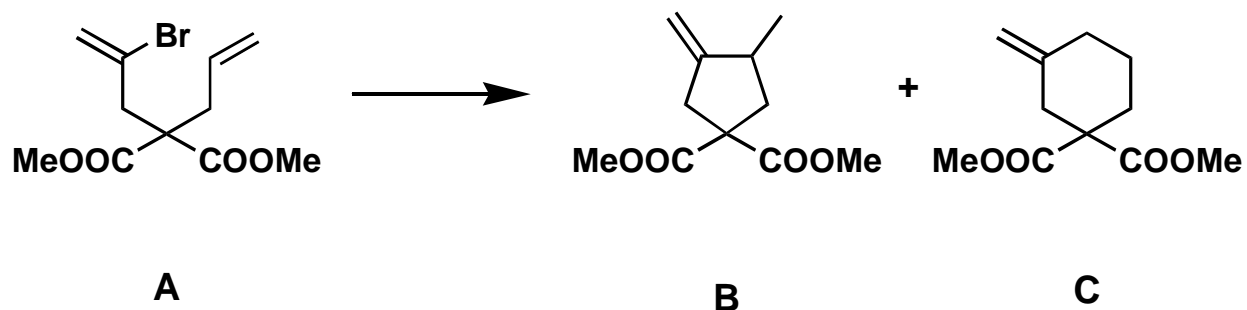


1. Compound **A** undergoes a free radical cyclization to give **B** and **C**. The ratio of **B/C** depends on concentration of  $\text{Bu}_3\text{SnH}$  and was 3 : 1 or 100 : 0 when 0.02 molar or 1.7 molar  $\text{Bu}_3\text{SnH}$  was used respectively. Explain.



2. How would you accomplish each of the following transformations (maximum 2 steps allowed for both reactions)?

