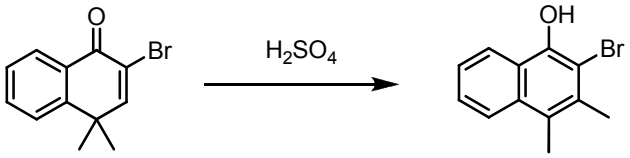
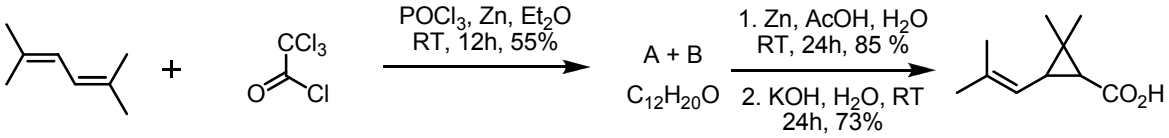
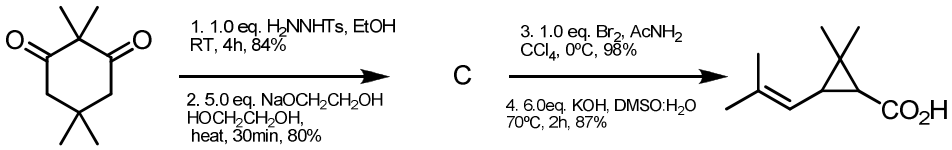
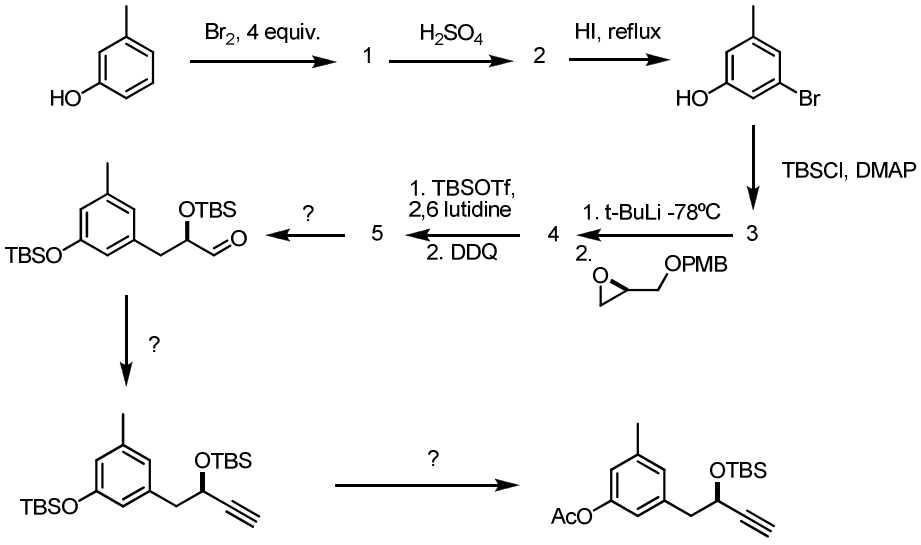
Problems for the 14th of November

1. Give the mechanism of this transformation



2. 3 synthesis of chrysanthemic acid are presented: draw the structures of the intermediates and propose reaction mechanisms





3. Synthesis: an intermediate in the synthesis of Landomycin A, antitumor agent: