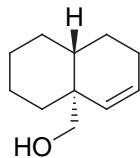
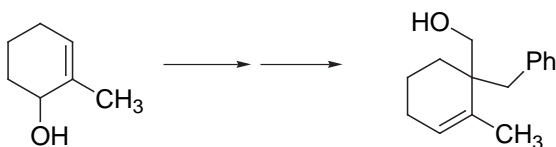


Literature references are required only for steps 1 and 2

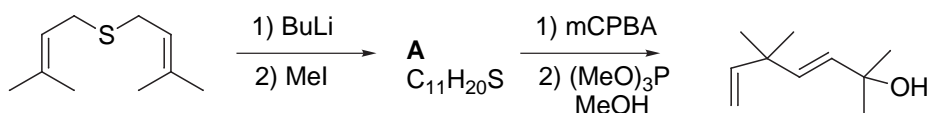
1. Outline a synthesis from commercial materials. Provide a literature reference for each step, (20 pts)



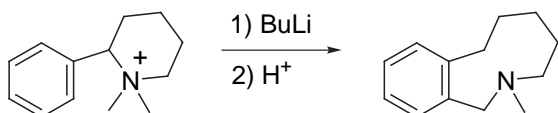
2. Outline a synthesis. Provide a literature reference for each step, (20 pts)



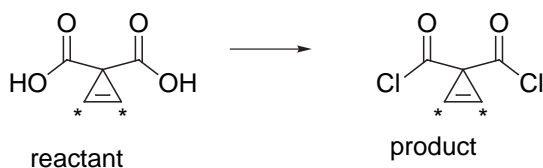
3. Provide a structure of **A**, and mechanisms for the formation of **A** and **B** (20 pts)



4. Provide a mechanism 20 pts



5. Do a Beilstein Reaction search using the following reaction: 20 pts



\* = free site