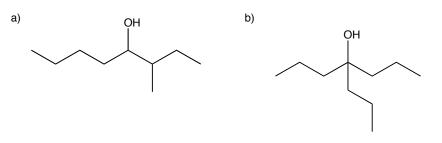
- 1. Provide a synthesis for *cis*-3-penten-2-ol using any organic compounds containing no more than 2 carbons and any inorganic reagents of your choice.
- 2. Starting from compounds containing no more than four carbon atoms, inorganic reagents of your choice, ether, and pyridine provide syntheses of the following molecules.



3. Propose plausible syntheses for the following two molecules. You can only use those organic molecules found in the Toolbox below and any inorganic reagents.

