9. Provide synthesis for the following compounds. All of the carbons in the target molecules should be derived from the allowed starting materials. You may use any common reagents.

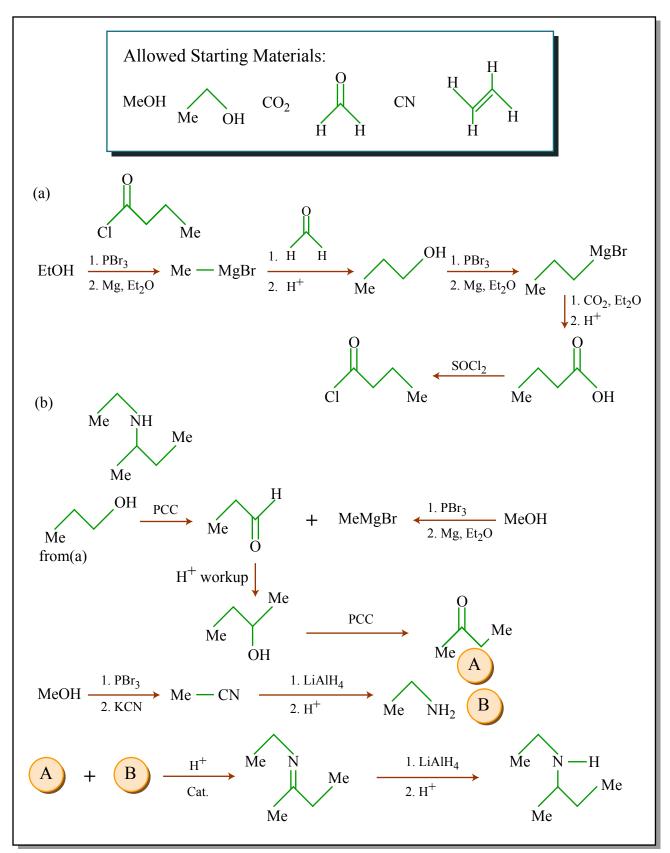


Figure by MIT OCW.