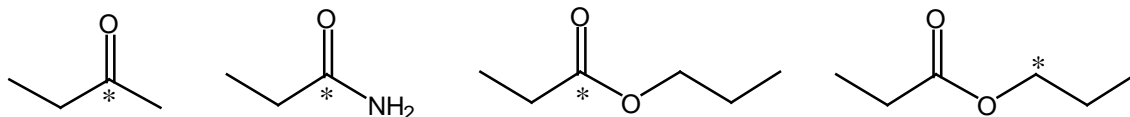
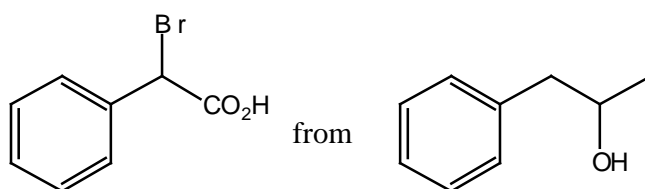
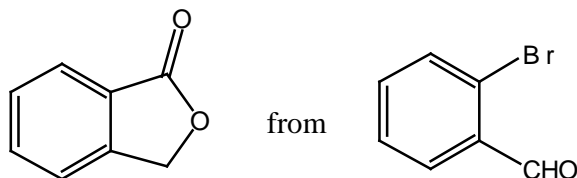
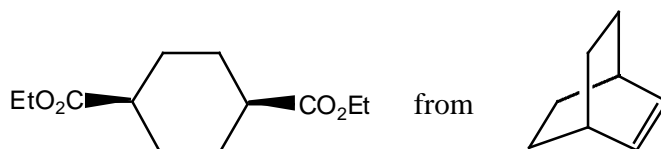


Problem Set #9
CH242-2002S

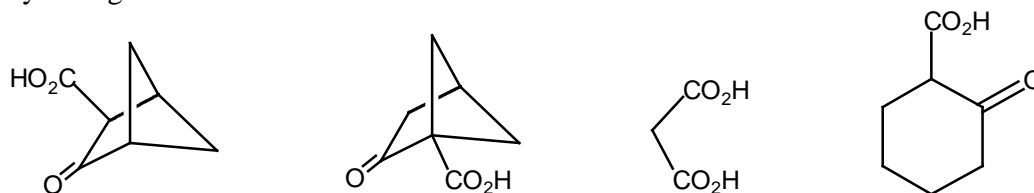
- (1) (a) Using ^{13}C as your only source of carbon-13 isotope, and other reagents of your choice, show how you would make the following compounds. The asterisk indicates position of label.



- (b) Propose efficient synthetic routes to the following compounds from the indicated starting materials. You may use reagents of your choice.



- (2) Identify the carboxylic acid below that is least likely to decarboxylate. Explain your reasoning clearly with good structures.



- (3) Propose a mechanism for the following reaction.

