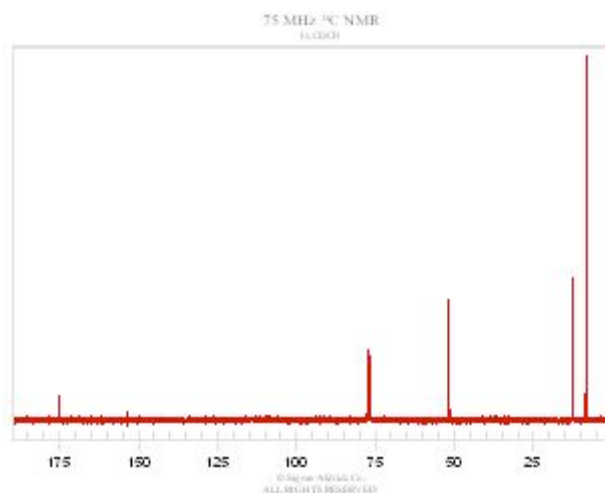
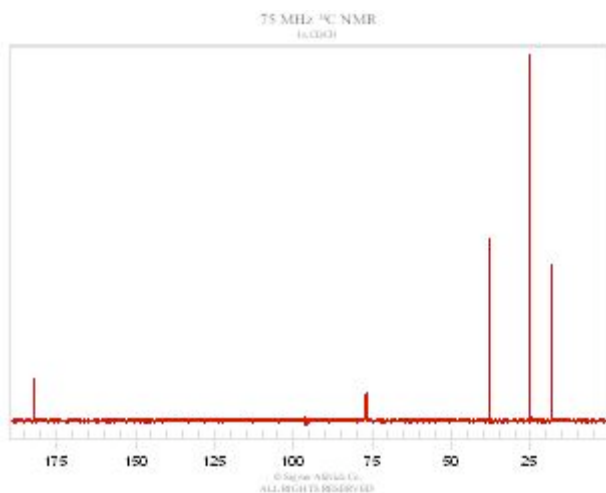
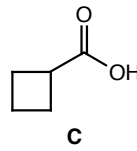
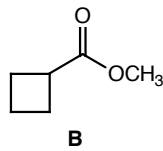
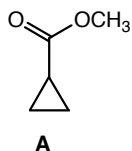
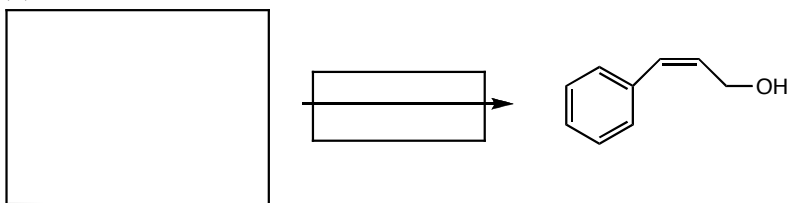


1. Match each ^{13}C NMR spectrum to one of the compounds shown below (the spectrum for one of the compounds is not given.).



2. Give the appropriate starting material, reagents, and/or product in the following reactions. Be careful to show stereochemistry where appropriate.

(a)



(b)

