CHM 202-01
Take-home question for Exam II
Due at 12:00 noon on February 28, 2014

You are to work individually – no collaboration with peers. You may not use the internet for any reason. You may use your text only (although I don’t think you will need it).

Your signature below states that you have abided by the above guidelines.
8.(15) Identify (draw the structure) the compound that gives rise to the following IR, mass, and $^1$H NMR spectra. Show all of your thought processes. The $^1$H NMR spectrum shows 3 different triplets, a quartet and a quintet (not in that order).

**IR:**

![IR Spectrum](image)

**Mass:** $m = 150; m+2 = 152$
8. (continued)

**1H NMR:** Integration upfield to downfield is 3:2:2:2:2

![1H NMR spectrum]

**13C NMR:**

![13C NMR spectrum]