

Problem 75, Chemistry 301X-2006

To which of the following five compounds do the following ^1H and ^{13}C NMR spectra belong? Explain your reasoning carefully, and assign the peaks to the appropriate hydrogens.

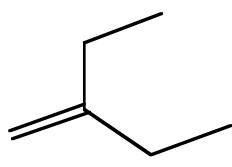
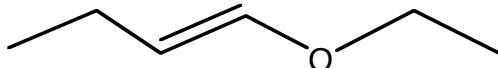
^1H : δ (CDCl_3): 1.2 (6H, t), 3.7 (4H, q), 4.6 (1H, d, $J = 7$ Hz), 5.6 (1H, d, $J = 7$ Hz).

^{13}C : δ (CDCl_3): 15.1, 65.2, 71.3, 105.4

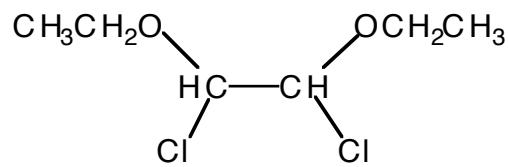
(a)



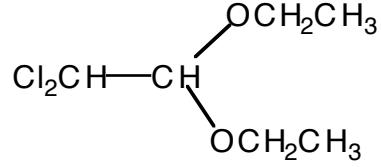
(b)



(c)



(d)



(e)