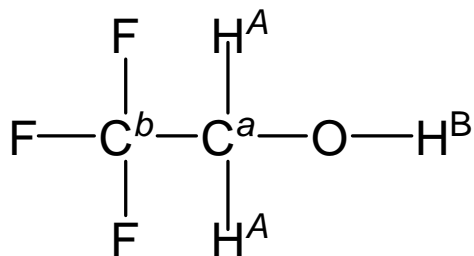


T5b Practice Problem (Refer to pages C69-C70 in the online manual):



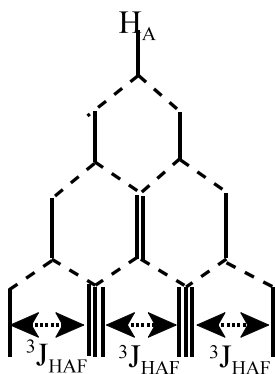
Please use this diagram of assignments when tabulating the spectra.

1. ^1H nmr spectrum (Refer to Figures 5-6 and 5-7)

a) Tabulate the ^1H nmr data and assign all of the peaks.

chemical shift, δ (ppm)	multiplicity	coupling constant (Hz)	relative integration	assignment	coupled to
3.91	quartet	8	2 H	H_{A}	F
3.29	singlet	-	1 H	H_{B}	-

b) Draw tree diagrams to justify all of the observed multiplets. Include relative intensities. Indicate where on the diagram you would measure the coupling constant and how it would be denoted.



1:3:3:1 quartet

