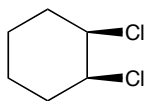Recitation Week 14   4/24/13

1. For each compound predict: (1) How many signals would you expect to observe in the ^{1}H NMR spectrum. (2) The relative integrations of each signal (if there is more than one). (3) The multiplicity of each signal (singlet, doublet, triplet etc...).
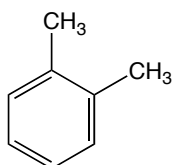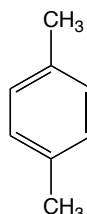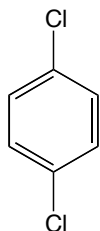
(a)

(# of signals only)
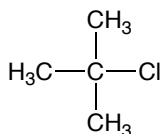
(b) $CH_3OCH_2CH_3$

(c)

(d)

(e)
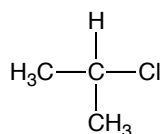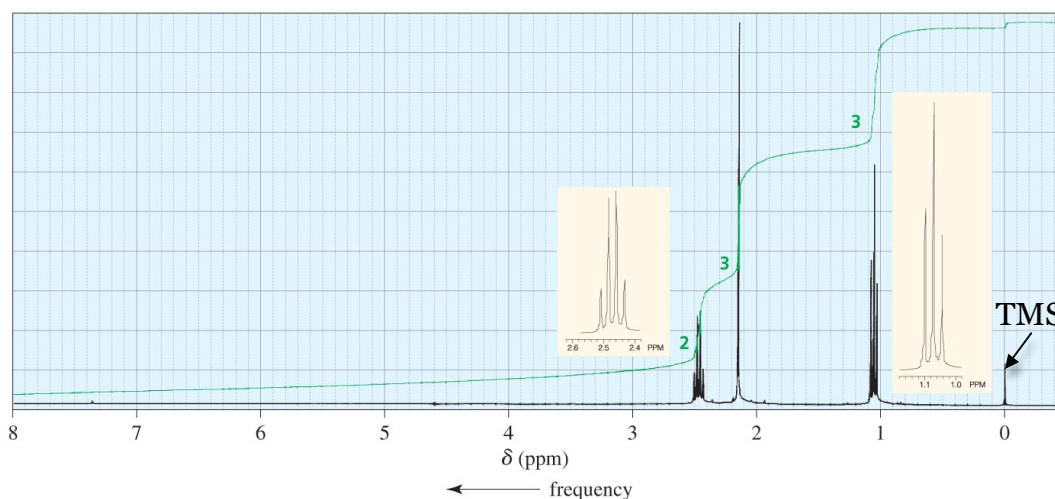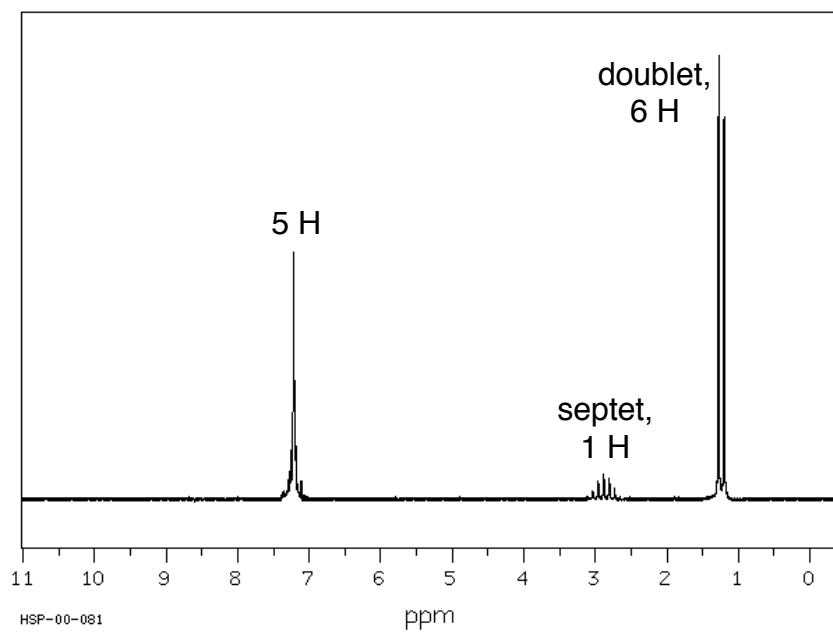

(f)
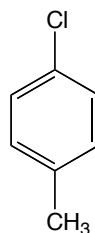
(g)

(h)

3. Propose structures for the compounds with the following ^{1}H NMR spectra and molecular formulas.

(a) C_4H_8O

(b) C_9H_{12}

doublet,
6 H

5 H

septet,
1 H

11 10 9 8 7 6 5 4 3 2 1 0

ppm

(c) $C_5H_{12}O$

3 H

1 H

10 9 8 7 6 5 4 3 2 1 0

ppm