Quiz - May 3, 2001

There is 1 page and 15 pts on this quiz. Please read each question carefully before answering.

1. (6 pts) Determine the number of different kinds of protons in each compound that would be observed by $^1$H NMR.
   (a) 1-chloropropane
   (b) 2-chloropropane
   (c) 1-bromo-2-methylbenzene

2. (9 pts) Tell precisely how you would use the proton NMR spectra to unambiguously distinguish between the following pairs of compounds.
   (a) $\text{A}$ and $\text{B}$
   (b) $\text{C}$ and $\text{D}$
   (c) $\text{E}$ and $\text{F}$