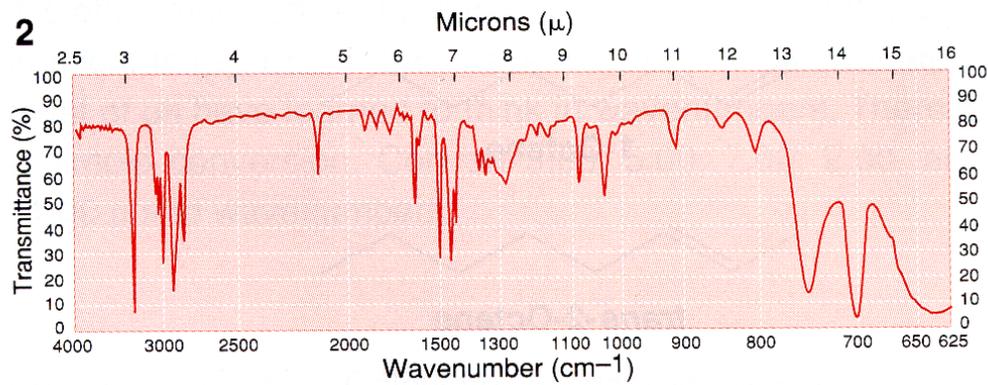
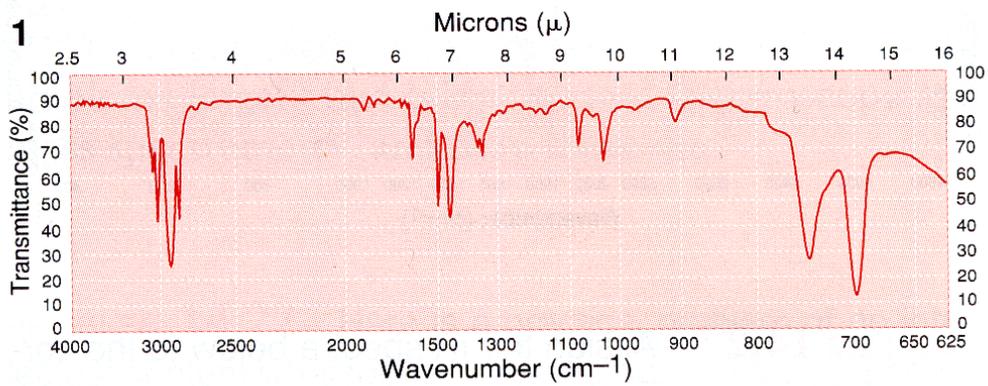
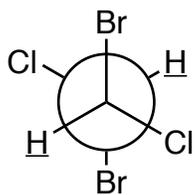


1. The IR spectra below belong to 5-phenyl-1-pentyne and 6-phenyl-2-hexyne. Which is which? Explain your reasoning.

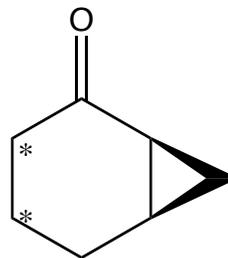


2. Identify the symmetrical relationship (identical, enantiotopic, diastereotopic) of the indicated atoms in the following molecules.

(a)



(b)



(c)

