1. Match each $^{13}$C NMR spectrum to one of the compounds shown below (the spectrum for one of the compounds is not given.).

**Compound C**: four peaks, no C-O

**Compound A**: four peaks, one C-O

2. Give the appropriate starting material, reagents, and/or product in the following reactions. Be careful to show stereochemistry where appropriate.

(a)

(b)