1. How could you use proton NMR to distinguish between the two compounds shown?

![Diagram of two compounds](image)

2. A compound has the structure C₅H₁₂O and the NMR spectrum below. The integrations from left to right are 1-2-6-3.

![NMR spectrum for C₅H₁₂O](image)

3. A compound has the formula C₉H₁₀O and the NMR spectrum below. The integrations from left to right are 1-5-2-2. Draw the structure of the compound. The two signals between 2 and 3 ppm are both triplets.

![NMR spectrum for C₉H₁₀O](image)