Problem 91. Chemistry 301X, 2006

(a)  Br_2/H_2O → **1** NaH → **2**

C_4H_8O

What a Simple Question. Be sure to give a good structure for **1** as well as for **2**. Be very careful to analyze completely the stereochemical consequences of each step.

Compound **2** has the following ^1H NMR spectrum:
δ 1.4, 3H, doublet, δ 3.7, 1H, quartet

Use the formula of **2** to help you. What information does it give you immediately about **1**?