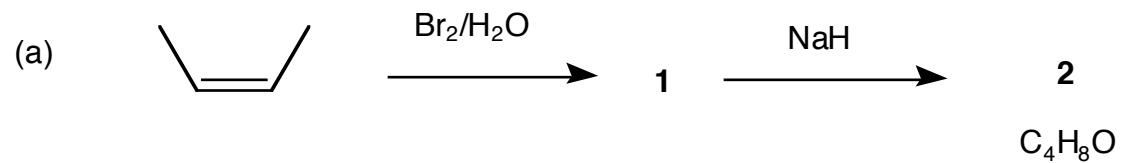


Problem 91. Chemistry 301X, 2006



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  $^1\text{H}$  NMR spectrum:  
 $\delta$  1.4, 3H, doublet,  $\delta$  3.7, 1H, quartet

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