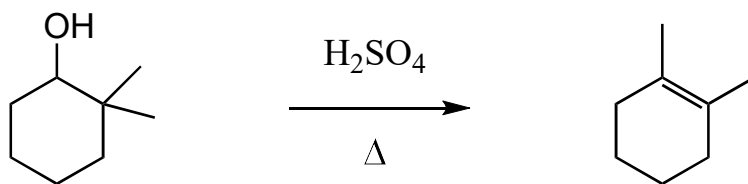


Organic Chemistry I, CHM 3140, Dr. Laurie S. Starkey, Cal Poly Pomona
Alcohol Dehydration Homework

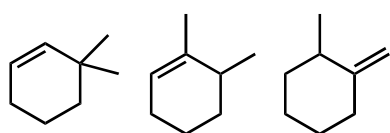
Name: _____ Section: _____ (day/time)

A) Provide a complete mechanism for the following dehydration reaction (pay close attention to details, including lone pairs, formal charges and the use of curved arrows).



B) Shown below are some of the other alkene products that could be generated by this alcohol dehydration. Why is the alkene given above the major product formed? Explain.

Minor products:



C) What reaction conditions are needed to synthesize a different alkene from the given alcohol? Provide suitable reagents to transform the alcohol starting material into the alkene shown below. If more than one step is required, show the products formed after each synthetic step.

