

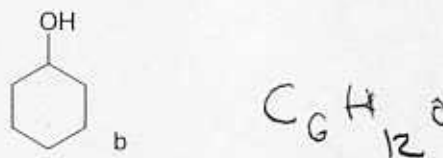
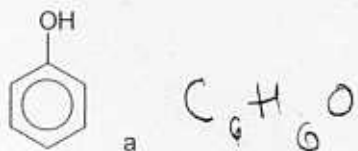
Quiz 9 Chem 231-06

Your name KEY

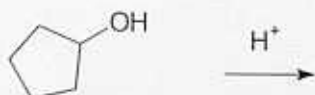
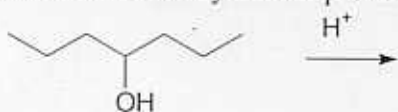
10/30/08

Student ID# _____

1. The formulas for the two compounds below look quite similar. Show sum formulas for them! (2 pts)

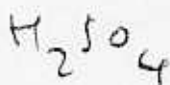
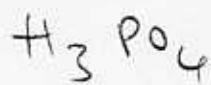


2. Acid catalyzed dehydration can be used to make various alkenes. Suggest structural formulas for dehydration products of the alcohols below! (4 pts)

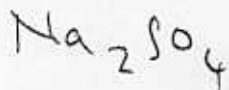


3. Circle all correct statements. They refer to the preparation of cyclohexene from cyclohexanol. A "I also could have prepared cyclohexene by treating hexene with a strong acid" **(B)** "I could have used sulfuric acid instead of phosphoric acid and obtained the same product" C "I could have used cyclopentanol instead of cyclohexanol and obtained the same product" D "My reaction consumed 2 mole equivalents of phosphoric acid for each mole equivalent of product prepared" (4 pts).

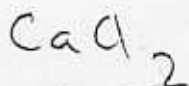
4. State correct formulas for phosphoric acid and sulfuric acid! (4 pts)



5. Name two common laboratory drying agents and show their formulas! (4 pts)



sodium sulfate



calcium chloride

6. Consider methanol, ethanol, and propanol. One of these can not be converted to an alkene by acid catalyzed dehydration. Which one? (2 pts)

Methanol - need 2 carbons to make an alkene!