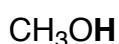


California State Polytechnic University, Pomona
Organic Chemistry CHM 201 Dr. Laurie S. Starkey Acid Strength Homework

Name: _____ Section: _____ (day/time)

For each of the following pairs of compounds, determine which is the stronger acid (**A** or **B**) **WITHOUT referring to a pK_a table**. Of course, you might be able to check some of your answers by looking up the pK_a 's, but each of these problems can be solved by understanding acidity trends. Draw the conjugate bases and compare the stabilities of the conjugate bases in order to make your prediction. Explain briefly.



A

conjugate base of A (CB-A):

conjugate base of B (CB-B):

B

Stronger acid? Explain.



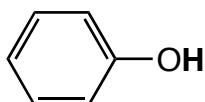
A

conjugate base of A (CB-A):

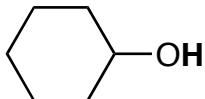
conjugate base of B (CB-B):

B

Stronger acid? Explain.



A

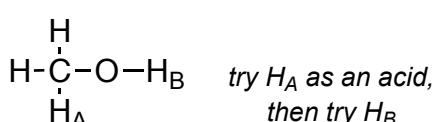


B

conjugate base of A (CB-A):

conjugate base of B (CB-B):

Stronger acid? Explain.



conjugate base using H_A (CB-A): conjugate base of H_B (CB-B):

More acidic proton? Explain.