Guide to lecture test 2.

Concentration of hydroxide ion in a solution of a strong acid

pH at the equivalence point (very roughly) for a titration of a weak with a strong

Ka, given pH and molarity

Finding Kb from Ka

Finding Ka from Kb

pH from H+ conc.

molarity of a strong base based on pH

Finding the pH of various solutions, including a strong acid, strong base, weak acid, and weak base.

Finding the pH of the conjugate of a listed acid or base

Finding the pH of a given mixture of conjugate acid and base, (Ka or Kb is given)

Bronsted definition

Comparing acid or base strength using Bronsted theory. ( i.e. strong to weak)

Acid, base, or neutral. ( 4 examples)

Long items:

Writing net ionic reaction , and labeling the acids and bases.

11 point problem involving preparing a buffer, and finding pH when acid, base or water are added to it.

12 point problem - strong acid-strong base titration. ( 4 titration points)

14 point problem, weak with strong. ( 4 titration points)

12 point problem, Le Chatelier's Principle.

Ksp from solubility, and common ion effect ( 5 points)

Solubility from Ksp, Common ion effect, and predicting precipitation ( 11 pts)