AP Chemistry Daily Videos

8.2 pH and pOH of Strong Acids and Bases

Video #1

1. How is a strong acid different from a weak acid? How does the arrow change in their dissociation equations?

2. If you aren't given a Ka or Kb value then you should assume you have a strong or weak acid/base?

3. Summarize the six main points reiterated at the end of the video.
   1.
   2.
   3.
   4.
   5.
   6.

Video #2

1. Evaluate how well you answered this question and identify any errors you made.

What is the correct ranking of 0.020 *M* solutions of acids and bases from lowest pH to highest pH?

A) HCN < HBr < NaOH < $Sr(OH)_2$

B) HBr < HCN < NaOH < $Sr(OH)_2$

C) HBr < HCN < $Sr(OH)_2$ < NaOH

D) HCN < HBr < $Sr(OH)_2$ < NaOH

2. Evaluate how well you answered this question and identify any errors you made.

	Volume (mL)	Molarity
HI	25.00	3.75×10^{-2} *M*
LiOH	25.00	??

Answer the following questions about the solutions in the table above. Assume the temperature is 25°C.

(a) What is the pH of the HI solution?
(b) The pH of the LiOH solution was found to be 8.250. What is the molarity of the LiOH solution?
(c) What is the molarity of lithium ion when the solutions are combined?
(d) Would the pH of the solution be predicted to be less than, equal to, or greater than 7? Justify your answer.