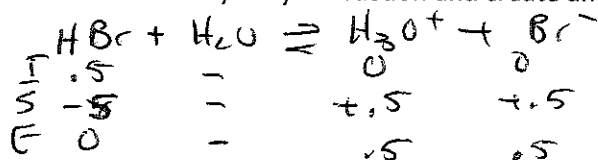


(#8-4)
Chemistry
pH of Strong Acids

1. 0.5M HBr.

a. Write the hydrolysis reaction and create an ISE table

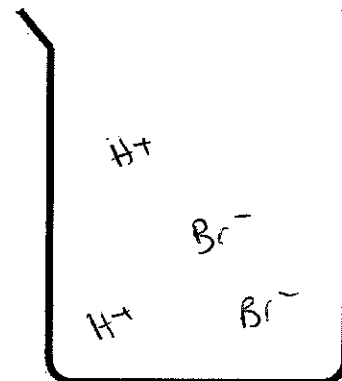


b. What is the concentration of H_3O^+ ions at the end?

0.5

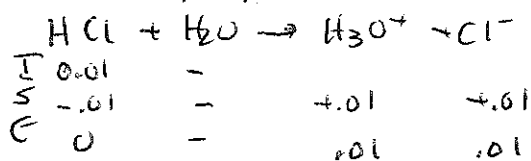
c. What is the pH of the solution?

$$-\log(.5) = \boxed{0.3 \text{ M}}$$



2. 0.01M HCl

a. Write the hydrolysis reaction and create an ISE table

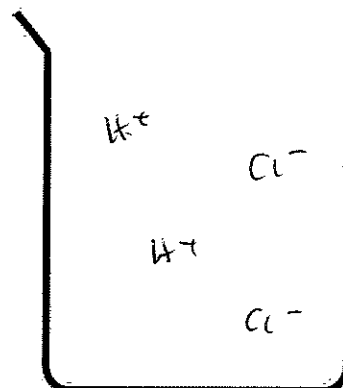


b. What is the concentration of H_3O^+ ions at the end?

.01

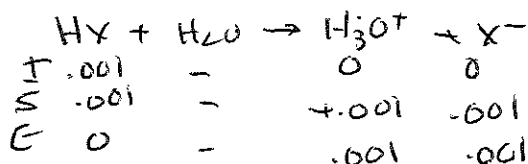
c. What is the pH of the solution?

$$-\log(.01) = 2$$



3. .001M HX (strong acid)

a. Write the hydrolysis reaction and create an ISE table



b. What is the concentration of H_3O^+ ions at the end?

.001

c. What is the pH of the solution?

3

d. What is the concentration of X^-

.001

