**Calculating The pH of Products of a Neutralization.**

**If you know the volumes and the molarities of an acid and a base you can solve the pH of the mixture (products).**

**Example:**

**NaOH + HCl 🡪 H2O + NaCl**

**.2 L .5L**

**x 2.0 M x 1.0 M**

**.4 moles OH- .5 moles H+**

**.5 moles H+ (HCl) neutralizes all .4 moles OH- (NaOH) leaving .1 moles H+ left.**

**So, new Molarity of H+ is:**

**.1 moles / .7 L = .14**

**Total volume**

**pH = -log (.14) = .85**