

• Notes: Acid-Base Neutralization



*Ionic Compound*



$$M_A V_A = M_B V_B$$

Ex) What volume of 1.50M HNO<sub>3</sub> is needed to neutralize 45.0mL of .75M KOH?

$M_A = 1.50\text{M}$

$V_A = ?$

$M_B = .75\text{M}$

$V_B = 45.0\text{mL} = .045\text{L}$

$(1.50\text{M})V_A = (.75\text{M})(.045\text{L})$

$V_A = .0225\text{L}$

$= 22.5\text{mL}$

Ex) You neutralized .200L of .15M HCl by using .300L of an unknown concentration of LiOH, what's its concentration?

$M_A = .15\text{M}$

$V_A = .200\text{L}$

$M_B = ?$

$V_B = .300\text{L}$

$(.15\text{M})(.200\text{L}) = M_B(.300\text{L})$

$.100\text{M} = M_B$