

## Answer on Question #55850 - Chemistry - General chemistry

### Question:

Need help writing four balanced equations with total ionic and net ionic equation using the following acids and bases. Reactions between the following acids and bases.

Acids - HCl and CH<sub>3</sub>COOH and Bases NH<sub>3</sub> and NaOH

Not sure but I think it would be HCl and NH<sub>3</sub>, HCl and NaOH, CH<sub>3</sub>COOH and NH<sub>3</sub> and CH<sub>3</sub>COOH and NaOH. Thank you

### Answer

The total ionic and net ionic equations are :

- I.  $HCl + NH_3 \rightarrow NH_4Cl$   
 $NH_3 + H^+ \rightarrow NH_4^+$
- II.  $HCl + NaOH \rightarrow NaCl + H_2O$   
 $H^+ + OH^- \rightarrow H_2O$
- III.  $CH_3COOH + NH_3 \rightarrow NH_4^+[CH_3COO]^-$   
 $NH_3 + H^+ \rightarrow NH_4^+$
- IV.  $CH_3COOH + NaOH \rightarrow CH_3COONa + H_2O$   
 $H^+ + OH^- \rightarrow H_2O$