# Titrations 1

**Question 1**

25.0 $cm^3$ of sodium hydroxide solution reacted with 18.5 $cm^3$ of 0.120 $mol/dm^3$ hydrochloric acid.
$NaOH(aq) + HCl(aq) \rightarrow NaCl(aq) + H_2O(l)$

a) Calculate the concentration of the sodium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 2**

15.8 $cm^3$ of potassium hydroxide solution reacted with 20.0 $cm^3$ of 0.085 $mol/dm^3$ nitric acid.
$KOH(aq) + HNO_3(aq) \rightarrow KNO_3(aq) + H_2O(l)$

a) Calculate the concentration of the potassium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 3**

21.2 $cm^3$ of sodium hydroxide solution reacted with 25.0 $cm^3$ of 0.105 $mol/dm^3$ hydrochloric acid.
$NaOH(aq) + HCl(aq) \rightarrow NaCl(aq) + H_2O(l)$

a) Calculate the concentration of the sodium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 4**

17.0 $cm^3$ of potassium hydroxide solution reacted with 15.0 $cm^3$ of 0.135 $mol/dm^3$ nitric acid.
$KOH(aq) + HNO_3(aq) \rightarrow KNO_3(aq) + H_2O(l)$

a) Calculate the concentration of the potassium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 5**

23.5 $cm^3$ of sodium hydroxide solution reacted with 20.0 $cm^3$ of 0.095 $mol/dm^3$ hydrochloric acid.
$NaOH(aq) + HCl(aq) \rightarrow NaCl(aq) + H_2O(l)$

a) Calculate the concentration of the sodium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 6**

19.8 $cm^3$ of potassium hydroxide solution reacted with 25.0 $cm^3$ of 0.115 $mol/dm^3$ nitric acid.
$KOH(aq) + HNO_3(aq) \rightarrow KNO_3(aq) + H_2O(l)$

a) Calculate the concentration of the potassium hydroxide solution in $mol/dm^3$. Give your answer

to 3 significant figures.

**Question 7**

16.2 $cm^3$ of sodium hydroxide solution reacted with 18.0 $cm^3$ of 0.075 $mol/dm^3$ hydrochloric acid.
$NaOH(aq) + HCl(aq) \rightarrow NaCl(aq) + H_2O(l)$

a) Calculate the concentration of the sodium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 8**

22.8 $cm^3$ of potassium hydroxide solution reacted with 20.0 $cm^3$ of 0.100 $mol/dm^3$ nitric acid.
$KOH(aq) + HNO_3(aq) \rightarrow KNO_3(aq) + H_2O(l)$

a) Calculate the concentration of the potassium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 9**

18.5 $cm^3$ of sodium hydroxide solution reacted with 15.0 $cm^3$ of 0.125 $mol/dm^3$ hydrochloric acid.
$NaOH(aq) + HCl(aq) \rightarrow NaCl(aq) + H_2O(l)$

a) Calculate the concentration of the sodium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.

**Question 10**

24.2 $cm^3$ of potassium hydroxide solution reacted with 25.0 $cm^3$ of 0.090 $mol/dm^3$ nitric acid.
$KOH(aq) + HNO_3(aq) \rightarrow KNO_3(aq) + H_2O(l)$

a) Calculate the concentration of the potassium hydroxide solution in $mol/dm^3$. Give your answer to 3 significant figures.