

## Acid- Base Titration Calculations

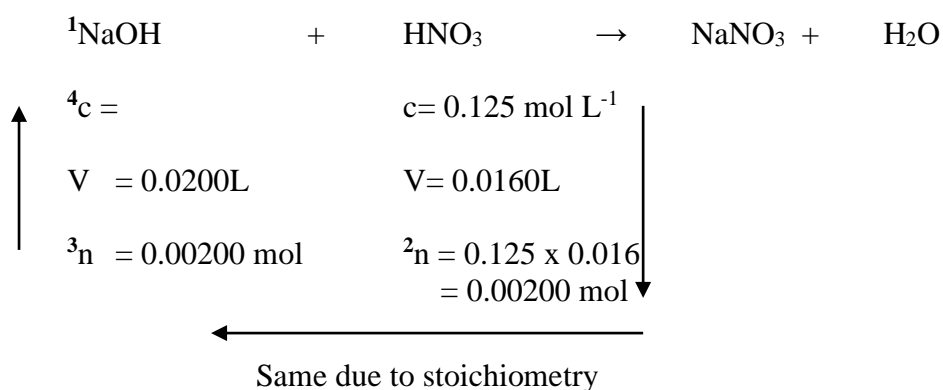
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### Steps

1. Write a balanced equation
2. Find the number of moles of the known substance
3. Use the balanced equation to find the number of moles of the unknown substance
4. Find the concentration of the unknown substance

### Example 1

20 mL of sodium hydroxide solution was titrated with 16 mL of  $0.125 \text{ mol L}^{-1}$  nitric acid using phenolphthalein indicator.



### Example 2

25 mL of Sodium Hydroxide solution was titrated with  $0.173 \text{ mol L}^{-1}$  Sulfuric Acid using phenolphthalein indicator. It took 19.1 mL of acid for the reaction to reach endpoint. What is the [ ] of NaOH?

