**Calculation Answers [9 marks]**

***Using a titre volume of 12.00 mL (0.012 L) – Your answers should vary slightly***

1. Write a balanced chemical equation for the reaction that occurs in the conical flask.

(1 mark)

**NaOH + CH3COOH 🡪 NaCH3COO + H2O**

1. Calculate the average titre volume. (1 mark) (1 mark)

**12.00 mL** *\*yours should be the average of your concordant titres*

1. Calculate the **concentration of acetic acid** in the **diluted vinegar**. (3 marks)
2. Calculate the **mass of acetic acid** in the **20 mL sample of undiluted vinegar** (2 marks)
3. The density of commercial (undiluted) vinegar is 1.01 g/mL. Find the **concentration of acetic acid in 20 mL of undiluted vinegar** expressed as a **%mass/mass**. (2 marks) (2 marks)