

G. Post-lab Questions

1. Why is the molar ratio between ascorbic acid and NaOH 1:1 in the titration reaction, even though the ascorbic acid has more hydrogen atoms?
2. Why is the average mass of the three tablets calculated instead of just weighing a single tablet?
3. Why is it important not to boil the Vitamin C solution?
4. Why could the amount of water used to make the Vitamin C solutions be approximated instead of measuring it out accurately?
5. Why was the ascorbic acid content for each trial calculated first, then averaged, instead of calculating the average volume of the titrant used in the three trials first, then calculating the ascorbic acid content from the average volume?
6. Why do you think the average % ascorbic acid content is significantly less than 100%?