

TITRATION EXP HW

Chille-

June '03

66 A student recorded the following buret readings during a titration of a base with an acid:

	Standard 0.100 M HCl	Unknown KOH
Initial reading	9.08 mL	0.55 mL
Final reading	19.09 mL	5.56 mL

- a In the space provided in your answer booklet, calculate the molarity of the KOH. Show all work. [1]
- b Record your answer to the correct number of significant figures. [1]

A student titrates 60.0 mL of $\text{HNO}_3(\text{aq})$ with 0.30 M $\text{NaOH}(\text{aq})$. Phenolphthalein is used as the indicator. After adding 42.2 mL of $\text{NaOH}(\text{aq})$, a color change remains for 25 seconds, and the student stops the titration.

June '04

- 56 What color change does phenolphthalein undergo during this titration? [1]
- 57 In the space provided in your answer booklet, show a correct numerical setup for calculating the molarity of the $\text{HNO}_3(\text{aq})$. [1]
- 58 According to the data, how many significant figures should be present in the calculated molarity of the $\text{HNO}_3(\text{aq})$? [1]