

Determination of K_{eq} Postlab

Please do not give short (one or two word answers) to the questions.

ALL Answers must be written by hand directly into your lab notebooks.

1. A student mixes 5.12 mL of 4.02×10^{-3} M $\text{Fe}(\text{NO}_3)_3$ with 4.88 mL 2.01×10^{-3} M KSCN. She finds that in the equilibrium mixture the concentration of FeSCN^{+2} is 1.40×10^{-4} M.
 - a. What is the initial concentration in solution of the Fe^{+3} and SCN^- ?
 - b. What is the equilibrium constant for the reaction?
 - c. What happened to the K^+ and the NO_3^- ions in this solution?

2. Why is it necessary to record the temperature even though you will not need it in your calculations?