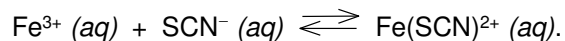


Name: \_\_\_\_\_

Section: \_\_\_\_\_

Partner's name: \_\_\_\_\_

Date: \_\_\_\_\_

**CHEMICAL EQUILIBRIUM I: THE EQUILIBRIUM CONSTANT DATA SHEET****Part 1 (SOLUTIONS A) : Determination of the Calibration Curve**

Reagent Concentrations	
[Fe(NO <sub>3</sub> ) <sub>3</sub> ], M	
[KSCN], M	
[HNO <sub>3</sub> ], M	

Temperature, °C \_\_\_\_\_

Solution	V <sub>KSCN</sub> , mL	[Fe(SCN) <sup>2+</sup> ] <sub>eq</sub> , M
1	1.00	
2	2.00	
3	3.00	
4	4.00	
5	5.00	
6	6.00	
7	7.00	
8	0.00	

**Part 2 (SOLUTIONS B): Determination of the Formation Constant for Fe(SCN)<sup>2+</sup>**

Reagent Concentrations	
[Fe(NO <sub>3</sub> ) <sub>3</sub> ], M	
[KSCN], M	
[HNO <sub>3</sub> ], M	

Temperature, °C \_\_\_\_\_

Solution	Absorbance	[Fe(SCN) <sup>2+</sup> ] <sub>eq</sub> , M	[Fe <sup>3+</sup> ] <sub>0</sub> , M	[SCN <sup>-</sup> ] <sub>0</sub> , M	[Fe <sup>3+</sup> ] <sub>eq</sub> , M	[SCN <sup>-</sup> ] <sub>eq</sub> , M	K
1							
2							
3							
4							
5							

Average K : \_\_\_\_\_