Equilibrium constant: Data and Results

Part 1 (SOLUTIONS A) : Solutions used for the Calibration Curve

Solution	V_{KSCN}, mL	$[Fe(SCN)^{2+}]_{eq}$, mol/L
0	0.00	
1	1.00	
2	2.00	
3	4.00	
4	6.00	

Part 2 (SOLUTIONS B): Determination of the formation constant *K* for $Fe(SCN)^{2+}$

Reactant part B	Concentrations (mol/L)
$[Fe(NO_3)_3]$	
[KSCN]	
$[HNO_3]$	

Solution	Absorbance	$[Fe(SCN)^{2+}]_{eq}$	$[Fe(NO_3)_3]$	[KSCN]	$[Fe(NO_3)_3]_{eq}$	$[KSCN]_{eq}$	*K*
1							
2							
3							

All concentrations are in mol/L

Average K (correct s.f.) _____ *at T =* _____ *°C*