Dougherty Valley HS AP Chemistry **Name:**
Equilibrium – K_{eq} Determination **Date:**
Period: **Seat #:**

Part I Data Table [Fill in title]:

Temperature: _____ ºC

Beaker	[$FeSCN^{2+}$]	Absorbance
1		
2		
3		
4		

Work for [$FeSCN^{2+}$] calculation: [to be included in the calculation section – new page in document]

Linear Regression equation:

Part II

Beaker	Absorbance	[$FeSCN^{2+}$] at equilibrium
A		
B		
C		

Work for [$FeSCN^{2+}$] calculation: [to be included in the calculation section – new page in document]

Qualitative Observations: [fill in here]

Beaker A

	Fe^{3+}	SCN^-	$FeSCN^{2+}$
Initial			0.00
Change			
Equilibrium			

Beaker B

	Fe^{3+}	SCN^-	$FeSCN^{2+}$
Initial			0.00
Change			
Equilibrium			

Beaker C

	Fe^{3+}	SCN^-	$FeSCN^{2+}$
Initial			0.00
Change			
Equilibrium			

Part II Calculations [one calc per type for each beaker]

All calculations must be completed by hand. Photo/scan your calculations and insert into another page in document below. Label it clearly

To be completed on separate sheet of paper in your calculation section:

1. Calculate the value of K_{eq} for the reaction for <u>each</u> Beaker. Explain how you used the data to calculate K_{eq}.

Discussion Questions: