

mL std added	Excitation	Emission	Data	Average	Unknown added (mL)	Data for graph	Nathan Gillispie		
0.00	350.0	450.0	23.7			0.00	22.0		
			23.2	23.5	3.2	0.30	27.5		
0.30			27.4			0.50	48.4		
			27.6	27.5	3	0.75	71.3		
0.50			49.0			1.05	72.7		
			47.8	48.4	3	1.30	82.8		
0.75			69.5						
			73.0	71.3	3				
1.05			71.2						
			74.1	72.7	3				
1.30			83.0						
			82.5	82.8	3				
To find how much unknown was in the original we must extrapolate backwards with the linear fit eqn to the y intercept for the line.									
y	0.000								
m	50.69								
b	21.14								
eqn	$x=(y-b)/m$								
x	-0.417								
To determine concentration of the original unknown we must divide x by the mL of unknown added to each vial and multiply by ppm of standard									
initial amount (mL)	0.417								
unknown volume (mL)	3.000								
ppm of standard	10.000								
eqn	$0.417\text{mL} \cdot 10\text{ppm} / 3.00\text{mL}$								
ppm of unknown	1.390								

Absorption over mL added

