

201 Lab 2

Spreadsheets and Plots

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Table 1: Constants and Given Data

Barametric Pressure (kPa)	80
Temperature (°C)	4
mass (g)	3.43
Molar mass (g/mol)	70
Moles (mol)	0.049

Table 2: Lab Data

Run # Units	P_{gauge} (kPag)	P_{abs} (kPa _a)	V_{pr} (cm ³)	ΔV_p (cm ³)	V_f (cm ³)	V_m (cm ³ /mol)
Start	1840	1920	140		70	1428.57142857143
2	2180	2260	145	5	65	1326.5306122449
3	2330	2410	150	10	60	1224.48979591837
4	2450	2530	155	15	55	1122.44897959184
5	2570	2650	160	20	50	1020.40816326531
6	2730	2810	165	25	45	918.367346938775
7	2850	2930	170	30	40	816.326530612245
8	2860	2940	170.88	30.88	39.12	798.367346938776
9	2840	2920	175	35	35	714.285714285714
10	2870	2950	180	40	30	612.244897959184
11	2880	2960	185	45	25	510.204081632653
12	2870	2950	190	50	20	408.163265306122
13	2880	2960	195	55	15	306.122448979592
14	2870	2950	200	60	10	204.081632653061
15	2870	2950	205	65	5	102.040816326531
16	2870	2950	206.56	66.56	3.44	70.204081632653
17	5380	5460	208.58	68.58	1.42	28.9795918367344
18	5740	5820	208.73	68.73	1.27	25.918367346939

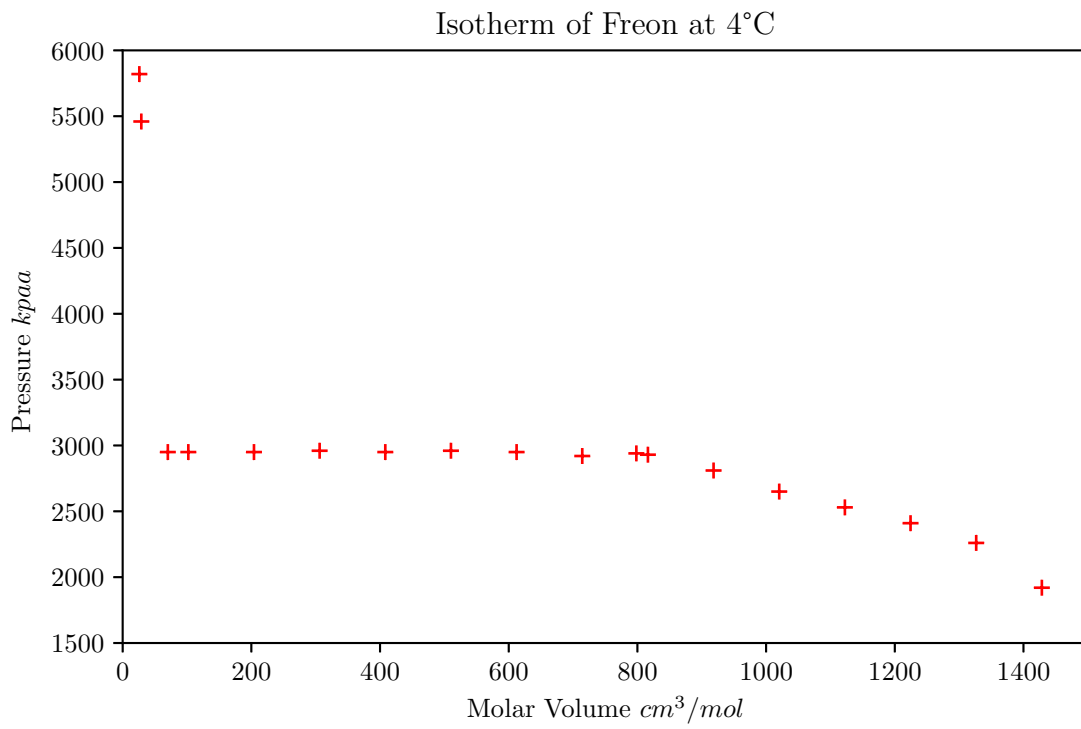


Table 3: Class Experimental Data

Group Number	Temperature °C	Pressure kPa	BUBBLE POINT Specific Volume (m^3/kg)	DEW POINT Specific Volume (m^3/kg)
1	0	4.743	0.00189	0.09653
2	16	7.515	0.001975	0.06149
3	32	11.33	0.002078	0.04048
4	48	16.4	0.002211	0.02714
5	65	23.42	0.002406	0.01776
6	80	31.31	0.002683	0.01182
7	90	37.64	0.003038	0.008415

