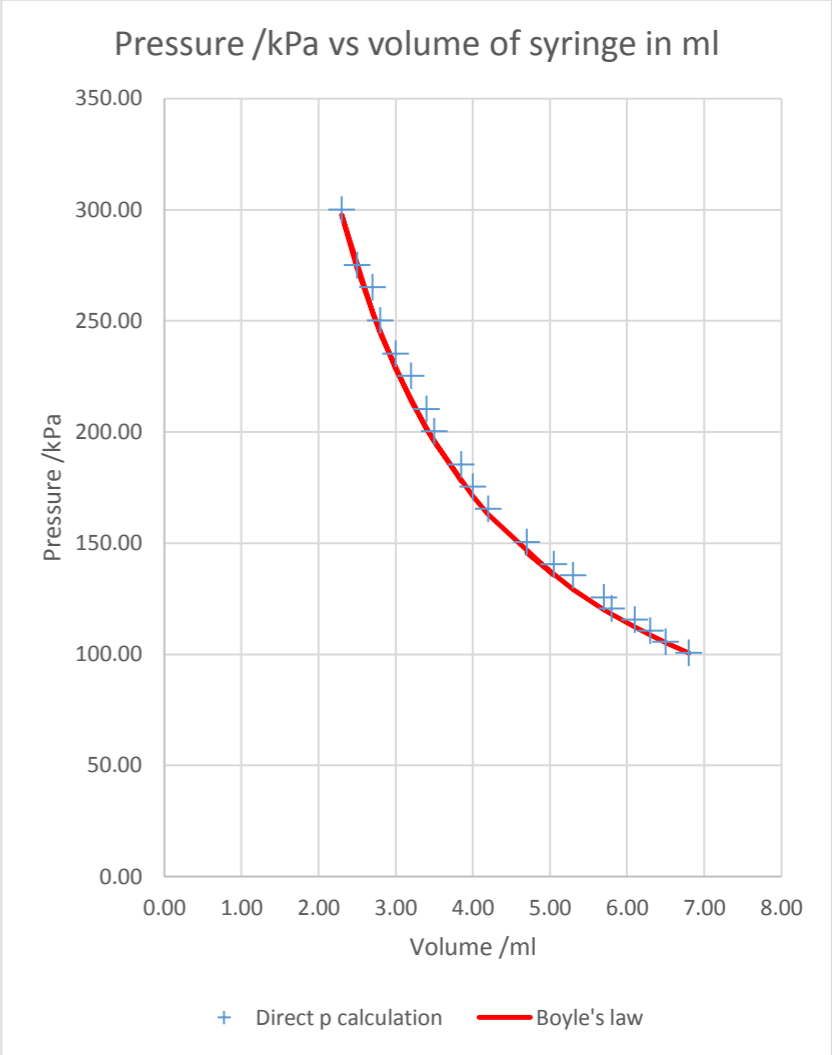
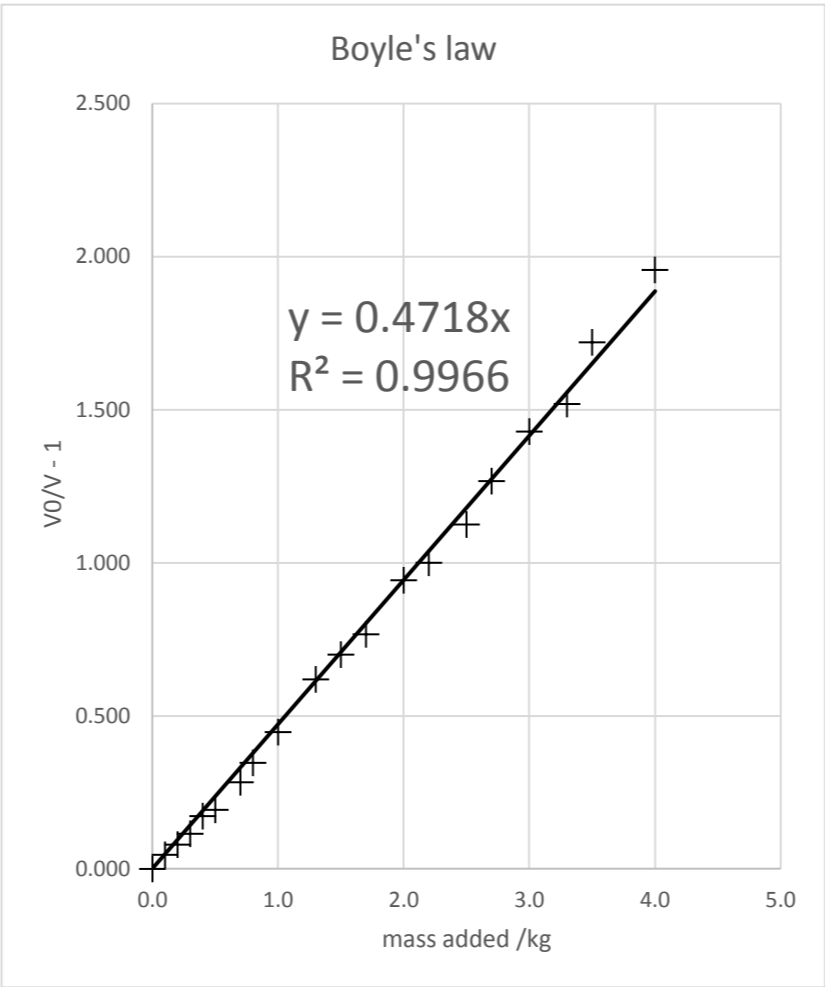


BOYLE'S LAW USING SEALED SYRINGES
A. French. 10/10/2020. P5. Winchester College.

p0 /kPa
100.7

V /ml	Mass added /kg	V0/V - 1
6.80	0.0	0.000
6.50	0.1	0.046
6.30	0.2	0.079
6.10	0.3	0.115
5.80	0.4	0.172
5.70	0.5	0.193
5.30	0.7	0.283
4.70	1.0	0.447
5.05	0.8	0.347
4.20	1.3	0.619
4.00	1.5	0.700
3.50	2.0	0.943
3.20	2.5	1.125
2.80	3.0	1.429
2.50	3.5	1.720
2.30	4.0	1.957
2.70	3.3	1.519
3.00	2.7	1.267
3.40	2.2	1.000
3.85	1.7	0.766

Pressure /kPa	P = p0*V0/V /kPa
100.70	100.70
105.68	105.35
110.67	108.69
115.65	112.26
120.64	118.06
125.62	120.13
135.59	129.20
150.54	145.69
140.58	135.60
165.50	163.04
175.47	171.19
200.39	195.65
225.31	213.99
250.23	244.56
275.16	273.90
300.08	297.72
265.19	253.61
235.28	228.25
210.36	201.40
185.44	177.86



Syringe plunger diameter/mm 14.83

Note likely to be an underestimate, so a diameter of 15.83mm is assumed.