Section 1: The following gases were collected over water under the conditions indicated. Correct each volume to the volume that the DRY GAS would occupy at <u>standard pressure</u>. Assume temperature does not change (remains constant – don't move it to standard temp).

1. 757 cm^3 at 21.0^{0}C and 87.3 kPa
2. 43.3 cm^3 at 70.0^{0}C and 121 kPa
3. 84.2 cm^3 at 29.0^{0}C and 101.3 kPa
4. 2.38 m^3 at 50.0^{0}C and 90.3 kPa

Section 2: The following gases were collected using a eudiometer. Assume constant temperature and find the new pressure as the volume is changed to the indicated value.

1. 53.1 ml of gas collected at 740 mm Hg atmospheric pressure. The level inside the tube is 27 mm Hg <u>lower</u> than the outside. Volume is adjusted to 60 ml.
2. 18.5 cm^3 of gas collected at an atmospheric pressure of 650 mm Hg. The level inside the tube is 10 mm <u>higher</u> than the outside. Volume is adjusted to 32.8 cm^3.

Table 7-4a Vapor Pressure of Water							
Temperature ^{o}C	Pressure kPa		Temperature ^{o}C	Pressure kPa		Temperature ^{o}C	Pressure kPa
0	0.6		20	2.3		30	4.2
3	0.8		21	2.5		32	4.8
5	0.9		22	2.6		35	5.6
8	1.1		23	2.8		40	7.4
10	1.2		24	3.0		50	12.3
12	1.4		25	3.2		60	19.9
14	1.6		26	3.4		70	31.2
16	1.8		27	3.6		80	47.3
18	2.1		28	3.8		90	70.1
19	2.2		29	4.0		100	101.3