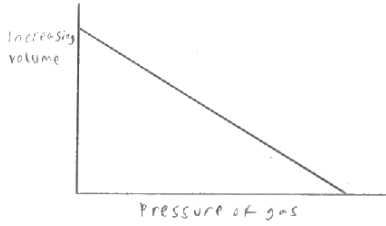

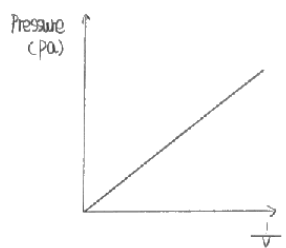


Question number	Answer	Notes	Marks
9 a (i)	straight line extrapolated in line with existing line such that it crosses the temperature axis; temperature given in the range -260 to -300;	judge by eye	2
(ii)	(speed) increases / eq;		1
b (i)	temperature; mass / amount / type (of gas);	allow 'number of moles' allow moisture level / humidity (of gas)	2
(ii)	<p>MP1. low volume gives high pressure / ORA; MP2. decreasing volume increases the pressure / ORA; MP3. relationship is non-linear / inversely proportional / idea that rate of change varies;</p>  <p>= 2 marks</p>  <p>= 3 marks</p>	<p>allow all marking points if seen from clear sketch graph with labelled axes</p> <p>N.B. 'pressure is inversely proportional to volume' gains all 3 marks</p> <p>Note that the following sketch graph would also gain all 3 marks</p> 	3

Total for question 9 = 8 marks