PHYS 1122 Exp. 12 Ideal Gas Law Homework

NAME:_____

1. How is an ideal gas different from a real gas?

2. A boy places his inflated birthday balloon inside the refrigerator (so nobody steals it). What will happen to the balloon? Explain.

3. A 5 liters cylinder contains oxygen at 20 ^{0}C and 101 kPa. If the temperature increases by 15 ^{0}C what is the final pressure of the gas?

4. A container of volume 0.25 m^3 is filled with a gas. A student records the temperature of the gas is as he increases the pressure inside the container and plots the data in the graph shown below. How many moles of gas are inside the container? Show your work.