## Pressure \& Temperature

Name: $\qquad$
*Show set up and all work (including units) to receive full credit.

1) The air pressure inside a submarine is 0.72 atm . What would be the height of a mercury column inside the submarine?
2) The recommended air pressure in a certain tire is 242 kPa . What is this pressure in atmospheres?
3) An experiment in a lab is performed at a pressure of 749.1 mm Hg . What is this pressure in torr?
4) What would be the pressure of a room be if the mercury read 850 mm Hg in torr, atmospheres, psi and in kPa ?
5) Fill in the data table with appropriate values by performing temperature conversions:

| Fahrenheit $\left({ }^{\mathrm{O}}\right)$ | Celsius $\left({ }^{\circ} \mathrm{C}\right)$ | Kelvin $(\mathrm{K})$ |
| :--- | :--- | :--- |
|  |  | 373 |
|  | 37 |  |
| 32 |  |  |
|  | 25 |  |
| 85 |  | 0 |
|  |  | 0 |

