| Altitude, <br> Km | Temperature, <br> ${ }^{\circ} \mathrm{C}$ | Pressure, <br> Pascal | Saturation Vapor Pressure, <br> Pascal | Vapor Mixing Ratio, <br> Dimensionless |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 25 | B | D | F |
| 15 | A | C | E | G |

1) Attach the problem statement for problem 4.7
2) Develop answers for $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}, \mathrm{F}$ and G . Attach your work. Expressions for temperature as a function of lapse rate and altitude, pressure as a function of altitude, saturation vapor pressure as a function of temperature, and for mixing ratio are in the online notes and in the textbook (Chapters 1, 2, 3 and 4).
3) Using F and G, develop an answer for problem 4.7. Attach your work.
4) Provide a drawing of the process on an altitude versus temperature diagram.
