
 name

1. Use the table of vapor pressures at the right, and show your work. If the pressure is 1014 hPa, the temperature is 15 °C, and the dew point is 10 °C, what are the following quantities?

T °C	$e_s(T)$ hPa
0	6.11
5	8.72
10	12.27
15	17.04
20	23.37
25	31.67
30	42.43

- Dewpoint depression _____,
- Vapor pressure _____,
- Saturation vapor pressure _____,
- Actual mixing ratio _____,
- Saturation mixing ratio _____,
- Relative humidity _____,

2. Use the table of vapor pressures for problem 1, and show your work. If the pressure is 1000 hPa, the temperature is 30 °C, and the dew point is 5 °C, what are the following quantities?

- Dewpoint depression _____,
- Vapor pressure _____,
- Saturation vapor pressure _____,
- Actual mixing ratio _____,
- Saturation mixing ratio _____,
- Relative humidity _____.