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20 pts total

Name: Solution

Use a Psychrometric Chart to answer the following questions.

1. A space at sea level is 75°F and RH = 50%

Find the other properties of the air in that space.

DB	75°F
RH	50%
WB	62.3 °F
Humidity	65 Gr/lb
VP	0.43 In Hg
Enthalpy	28.2 Btu/lb
Vs	13.6 ft ³ /lb
Dew Point	55.2 °F

2. A space at sea level has a WB = 65°F and a RH = 45%

Find the other properties of the air in that space.

DB	80 °F
RH	45%
WB	65°F
Humidity	69 Gr/lb
VP	0.47 In Hg
Enthalpy	30 Btu/lb
Vs	13.8 ft ³ /lb
Dew Point	55.4 °F

Continued on back

3. A space at sea level is 25°F and RH = 30%

Find the other properties of the air in that space.

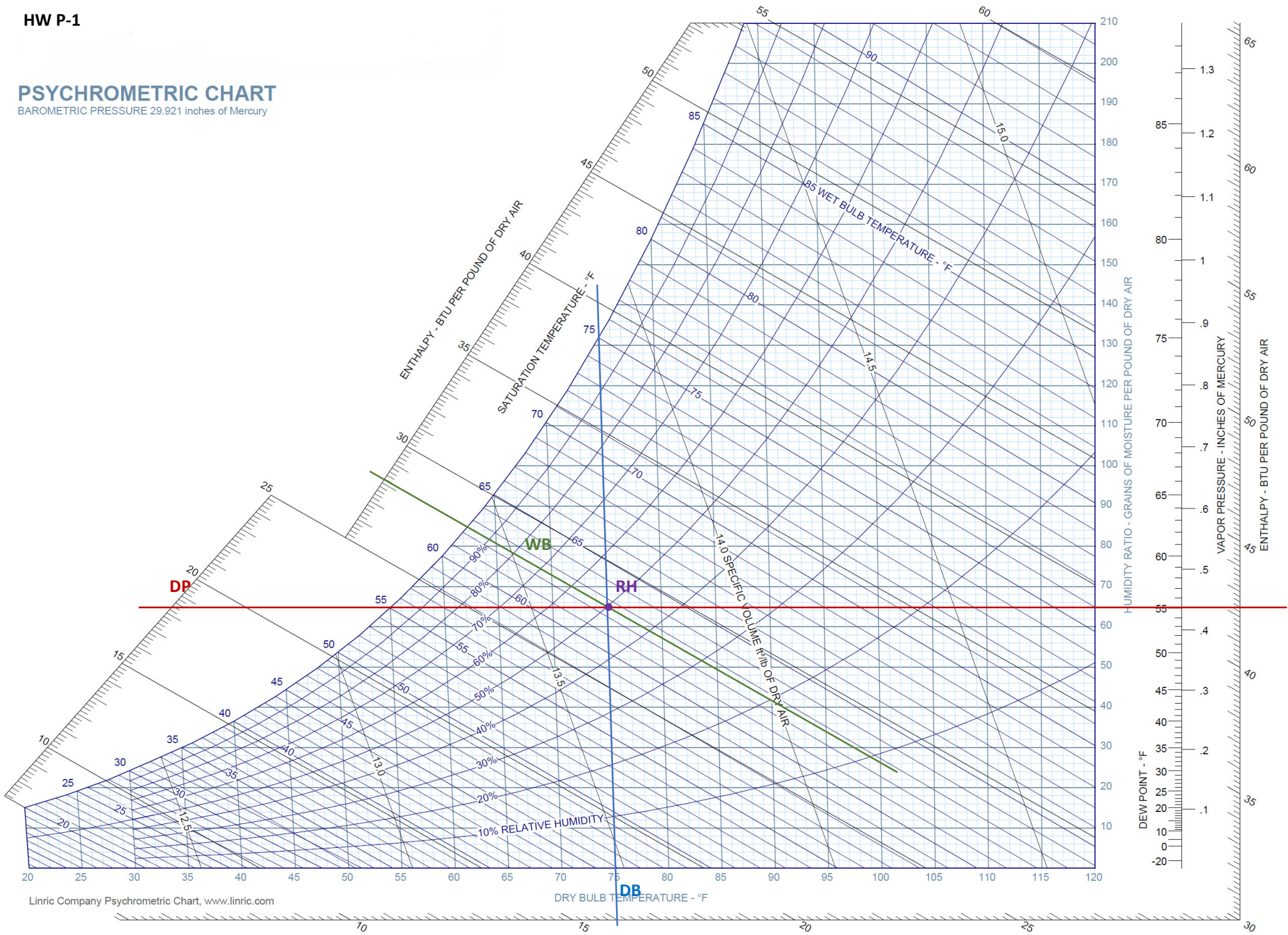
DB	25°F
RH	30%
WB	19 °F
Humidity	6 Gr/lb
VP	0.02 In Hg
Enthalpy	6.9 Btu/lb
Vs	12.3 ft ³ /lb
Dew Point	0.7 °F

4. Relative humidity is 100 % at the saturation line.

5. Enthalpy is the sum of latent heat and Sensible heat.

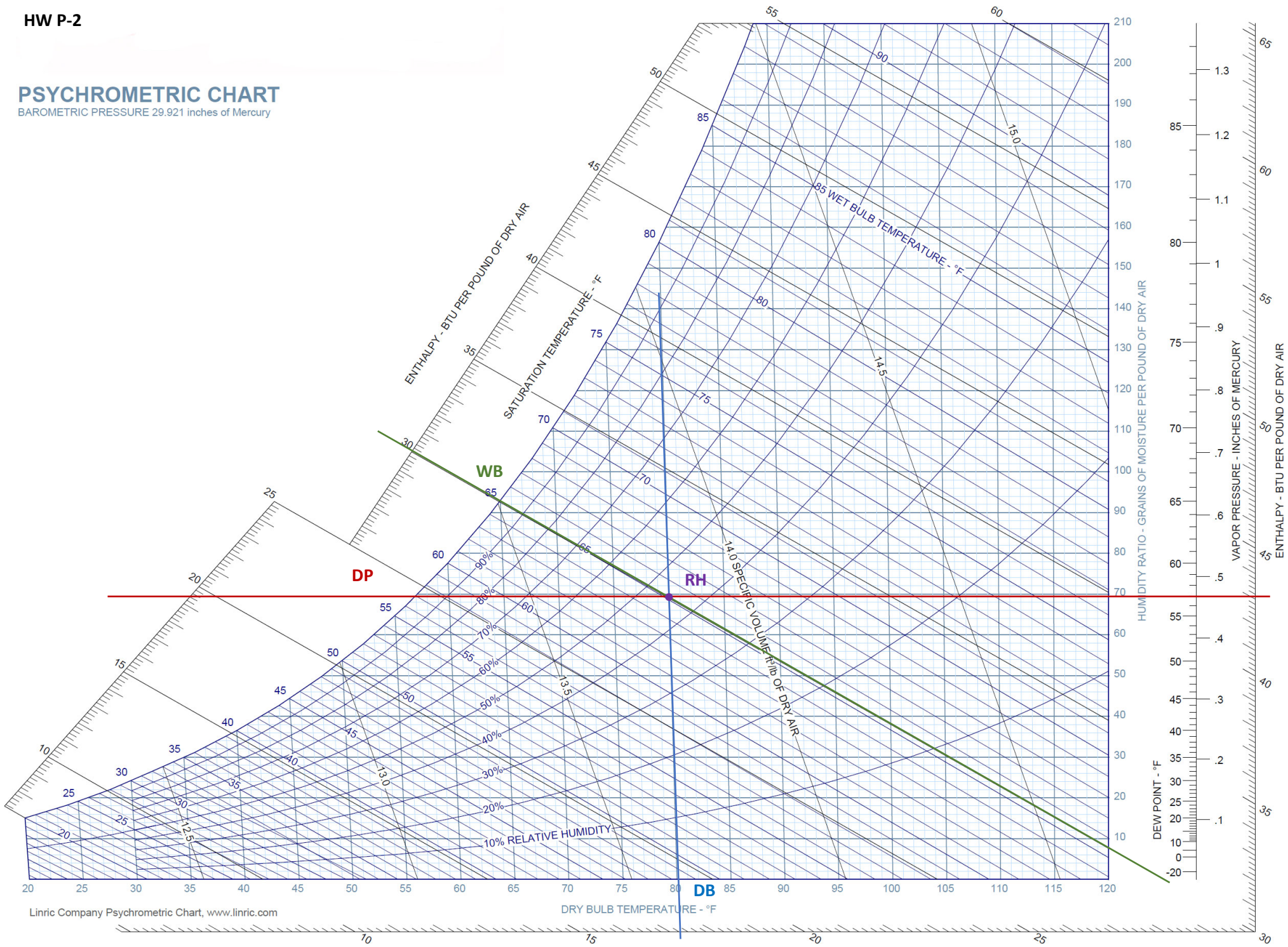
PSYCHROMETRIC CHART

BAROMETRIC PRESSURE 29.921 inches of Mercury



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