Finding Dew Point Temperature & Relative Humidity - Page #12 ESRT

Directions: Using page #12 of the ESRT, answer the questions on this worksheet.

1. What is the dew point temperature AND relative humidity when the dry-bulb temperature is 14°C and the wet-bulb temperature is 8°C? **Include the proper units!**

   **Dew Point Temperature:** __________________________
   
   **Relative Humidity:** __________________________

2. What is the dew point temperature AND relative humidity when the dry-bulb temperature is 16°C and the wet-bulb temperature is 12°C? **Include the proper units!**

   **Dew Point Temperature:** __________________________
   
   **Relative Humidity:** __________________________

3. What is the dew point temperature AND relative humidity when the dry-bulb temperature is 24°C and the wet-bulb temperature is 16°C? **Include the proper units!**

   **Dew Point Temperature:** __________________________
   
   **Relative Humidity:** __________________________

4. What is the dew point temperature AND relative humidity when the dry-bulb temperature is 12°C and the wet-bulb temperature is 7°C? **Include the proper units!**

   **Dew Point Temperature:** __________________________
   
   **Relative Humidity:** __________________________

5. What is the dew point temperature AND relative humidity when the dry-bulb temperature is 11°C and the wet-bulb temperature is 4°C? **Include the proper units!**

   **Dew Point Temperature:** __________________________
   
   **Relative Humidity:** __________________________
CHALLENGE QUESTIONS

*Hint: The wet-bulb temperature can NEVER be greater than the dry-bulb temperature.*

6. A student used a sling psychrometer to measure the dew point of the air. If the dew point was 6°C and the dry-bulb temperature was 10°C, what was the wet-bulb temperature?

7. A student used a sling psychrometer to measure the relative humidity of the air. If the relative humidity was 65% and the dry-bulb temperature was 10°C, what was the wet-bulb temperature?

8. What is the difference between the dry-bulb and the wet-bulb temperature if the relative humidity is 28% and the dry bulb temperature is 0°C?

9. A student used a sling psychrometer to measure the dew point of the air. If the dew point was -5°C and the dry-bulb temperature was 8°C, what was the relative humidity?

10. A student used a sling psychrometer to measure the relative humidity of the air. If the relative humidity was 67% and the dry-bulb temperature was 2°C, what was the dew point temperature?