

2. Listed below are three cities, each with their air temperature and dew-point temperature for 3 PM on a given summer day.

	Air Temperature	Dew-point Temperature
City A	105°F	75°F
City B	75°F	60°F
City C	85°F	65°F

- Which city has the highest relative humidity?
- Which city has the lowest relative humidity?
- Which city has the greatest amount of water vapor in the air?
- Which city has the least amount of water vapor in the air?
- Use Table 1 (Saturation Vapor Pressure) and the formula,

$$\text{relative humidity} = \frac{e}{e_s} \times 100\%$$

to obtain the relative humidity for each of the three cities. (Additional information on obtaining relative humidity using this formula is given in your textbook on p. 122.)

Relative humidity for City A _____ %

Relative humidity for City B _____ %

Relative humidity for City C _____ %