

**Chapter 6 Performance Task** (continued)

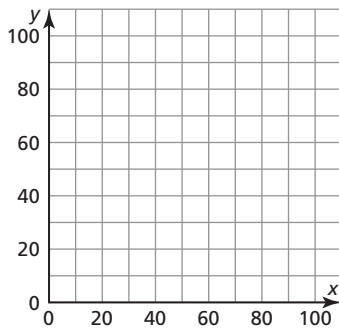
**Heat Index**

Heat Index is a measure of how hot it feels on a warm day. When the humidity (the amount of moisture in the air) is high, sweat does not dry as quickly. So, the air feels hotter than it does during times of low humidity. When the relative humidity is 80%, every 1° increase in temperature above 83 °F causes a 3° temperature increase in Heat Index. How can you use a function to represent this relationship?

1. Complete the table assuming the relative humidity is 80%.

<b>Temperature (°F)</b>	83	84	85	86	87	88
<b>Heat Index (°F)</b>	91					

2. Plot the points in the table and draw a line through the points. Then describe the pattern.



3. Write a linear function for this data. Explain your reasoning.

