**Lesson 4-5: Interpret Two-Way Relative Frequency Tables**

1. Sample answer: A two-way relative frequency table is useful for comparing the frequencies of data values relative to a total. Instead of comparing counts, you can compare the relative frequencies of each data value to the total, by rows, columns, or the entire table.

2. Sample answer: The percentages won't add up to 100% because they are not all relative to a common total.

3. Yes; Sample answer: A frequency table with a total value of 100 will provide the same information as a total relative frequency table because dividing a data value by the total of 100 and then multiplying by 100 to determine the percent will not change the value.

4. $\frac{101}{223} \cdot 100 \simeq 45\%$

5. $\frac{86}{131} \cdot 100 \simeq 66\%$

6. $\frac{86}{101} \cdot 100 \simeq 85\%$

7. 20.8; 27.5; 48.3
   16.7; 12.5; 29.2
   10.0; 12.5; 22.5
   47.5; 52.5

8. 60.0; 40.0
   43.3; 56.7
   50.9; 49.1

9. 4-door

10. a. 48%
    b. No; Sample answer: The relative frequencies are all very close in value.

11. a. 68; 32; 100
    22; 78; 100
    45; 55; 100

    b. Yes; Sample answer: 68% of workers in the day shift answered "Yes", but only 22% of workers in the night shift answered "Yes."

12. A