**Additional Practice 3-4 to 3-6 WS**

Tell whether or not each sequence is an arithmetic sequence. If it is an arithmetic sequence, give the common difference.

**1.** 4, 8, 12, 16, … **2.** −11, 5, 0, 6, … **3.** 12, 23, 34, 45, …

Write a recursive formula and an explicit formula for each arithmetic sequence.

**4.** 9, 15, 21, 27, … **5.** 1.5, 2.25, 3, 3.75, … **6.** 7, 0, −7, −14, …

Write an explicit formula for each recursive formula and a recursive formula for  
each explicit formula.

**7.** *a*1 = 5 **8.** *a*1 = −8 **9.** *an*= 15 + 4*n*  
*an* = *an* − 1 + 3 *an* = *an* − 1 – 3

**10.** You open a savings account with a $400 deposit. Each month after that, you  
deposit $25. Write an explicit rule to represent the amount of money you  
deposit into your savings account. How much money will you have in the  
account in month 12?

What is the association between the *x*- and *y*-values for each graph?

1. **** **12.**

Describe the type of correlation each scatter plot shows. Draw a trend line that  
models each data set and find the equation of that trend line.

13.  14.

**15.** For the trend line in Exercise 13, what would the expected temperature be after  
2 hours? Explain what that means in the context of the data.

**16.** For the trend line in Exercise 14, what would the expected sales be if the cost  
were set at $6.50? Explain what that means in the context of the data.

**17.** Would you expect the trend line for the temperature to continue in the same  
direction indefinitely? Explain.

Describe the type of correlation indicated by each correlation coefficient.

**18.** *r* = 0.875 **19.** *r* = −0.976 **20.** *r* = 0.043