

**GUIDED PRACTICE** for Examples 3, 4, and 5

4. **OIL PRODUCTION** The table shows the U.S. daily oil production y (in thousands of barrels) x years after 1994.

x	0	1	2	3	4	5	6	7	8
y	6660	6560	6470	6450	6250	5880	5820	5800	5750

- Approximate the best-fitting line for the data.
- Use your equation from part (a) to predict the daily oil production in 2009.
- Use a graphing calculator to find and graph an equation of the best-fitting line. Repeat the prediction from part (b) using this equation.

2.6 EXERCISES

HOMework KEY

= **WORKED-OUT SOLUTIONS**
on p. WS1 for Exs. 9, 11, and 25

= **TAKS PRACTICE AND REASONING**
Exs. 16, 18, 21, 28, 30, and 31

= **MULTIPLE REPRESENTATIONS**
Ex. 27

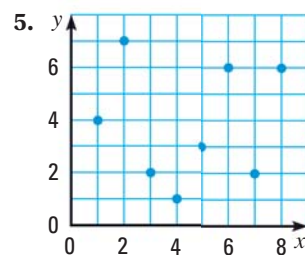
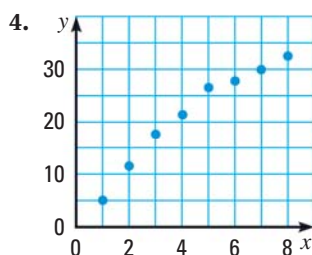
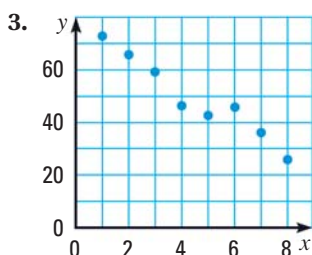
SKILL PRACTICE

- VOCABULARY** Copy and complete: A line that lies as close as possible to a set of data points (x, y) is called the ? for the data points.
- WRITING** Describe how to tell whether a set of data points shows a positive correlation, a negative correlation, or approximately no correlation.

EXAMPLE 1

on p. 113
for Exs. 3–5

DESCRIBING CORRELATIONS Tell whether the data have a *positive correlation*, a *negative correlation*, or *approximately no correlation*.



- REASONING** Explain how you can determine the type of correlation for a set of data pairs by examining the data in a table without drawing a scatter plot.

EXAMPLE 2

on p. 114
for Exs. 7–9

CORRELATION COEFFICIENTS Tell whether the correlation coefficient for the data is closest to -1 , -0.5 , 0 , 0.5 , or 1 .

