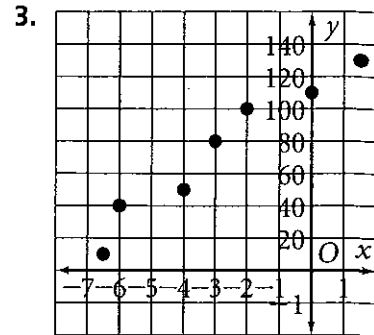
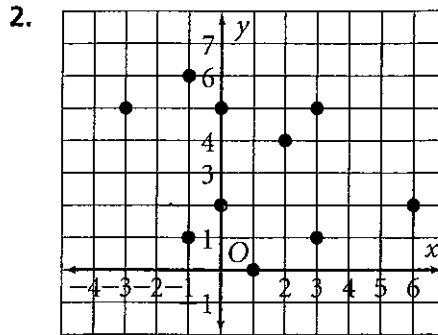
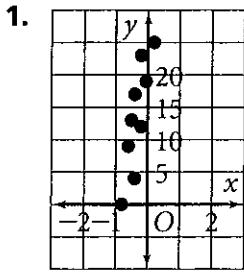


Practice 6-7

Scatter Plots and Equations of Lines

Decide whether the data in each scatter plot follow a linear pattern. If they do, find the equation of a trend line.



Use a graphing calculator to find the equation of the line of best fit for the following data. Find the value of the correlation coefficient r and determine if there is a strong correlation between the data.

4.

x	y
1	7
2	5
3	-1
4	3
5	-5

5.

x	y
1	6
2	15
3	-5
4	1
5	-2

6.

x	y
1	5
4	8
8	3
13	10
19	13

7.

x	y
12	28
15	50
18	14
21	28
24	36

Draw a scatter plot. Write the equation of the trend line.

8.

x	y
1	17
2	20
3	22
4	26
5	28
6	31

9.

Year	U.S. Union Membership (millions)
1988	17.00
1989	16.96
1990	16.74
1991	16.57
1992	16.39
1993	16.60
1994	16.75
1995	16.36
1996	16.27
1997	16.11
1998	16.21

Source: *World Almanac 2000*, p. 154.

10.

x	y
1	18
2	20
3	24
4	30
5	28
6	33

11.

Year	U.S. Unemployment Rate (%)
1988	5.5
1989	5.3
1990	5.6
1991	6.8
1992	7.5
1993	6.9
1994	6.1
1995	5.6
1996	5.4
1997	4.9
1998	4.5

Source: *World Almanac 2000*, p. 145.