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.

2.





6.



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.

x	У
1	7
2	5
3	-1
4	3
5	-5

5.	x	У
	1	6
	2	15
	3	-5
	4	1
	5	-2

x	у
1	5
4	8
8	3
13	10
19	13

7.	x	У
	12	28
	15	50
	18	14
	21	28
	24	36

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

9.

8.	x	У
	1	17
	2	20
	3	22
	4	26
	5	28
	6	31

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	У
	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.

4.