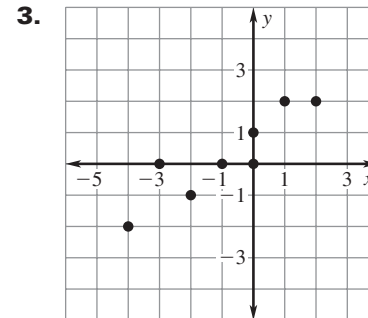
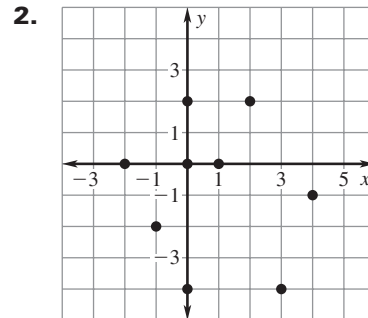
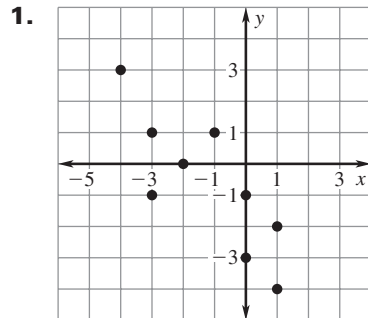


**LESSON**  
**5.6**
**Practice C**

For use with pages 325–333

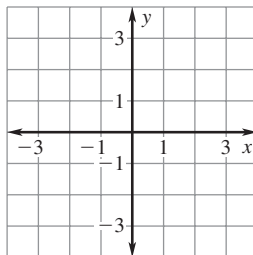
Tell whether  $x$  and  $y$  show a *positive correlation*, a *negative correlation*, or *relatively no correlation*.



Make a scatter plot of the data. Draw a line of fit. Write an equation for the line.

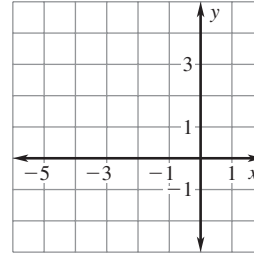
4. 

<b>x</b>	-2	-1	-1	0	1	2
<b>y</b>	2	1	0	-1	-2	-3



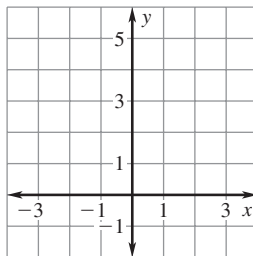
5. 

<b>x</b>	-5	-4	-3	-2	-1	0
<b>y</b>	1	0	1	3	2	4



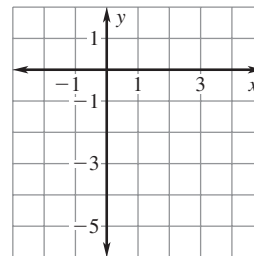
6. 

<b>x</b>	-3	-2	-1	0	1	2
<b>y</b>	-1	1	0	2	4	5



7. 

<b>x</b>	-1	0	1	2	3	4
<b>y</b>	-5	-3	-2	-2	0	1

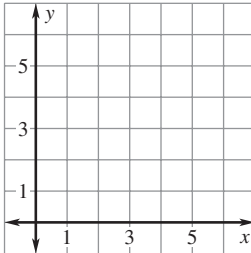


**LESSON**  
**5.6**
**Practice C** *continued*  
 For use with pages 325–333

**Make a scatter plot of the data. Describe the correlation of the data. If possible, fit a line to the data and write an equation of the line.**

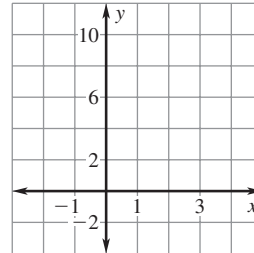
8.

<b>x</b>	4.8	5	5.4	5.8	6.1	6.3	6.5
<b>y</b>	1	2	1	3	4	6	5



9.

<b>x</b>	3	2	2	2	1	1	0
<b>y</b>	9	8	6	3	4	2	0



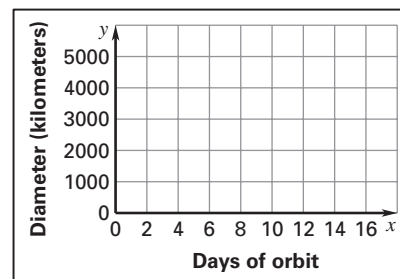
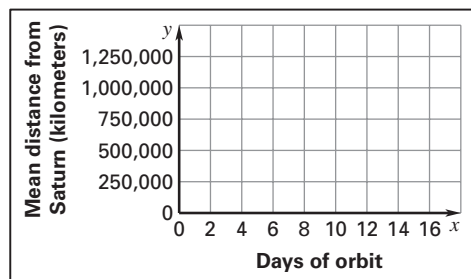
10. **Local Government** The table shows the number of local governments in the United States from 1972 to 2002.

<b>Year</b>	1972	1977	1982	1987	1992	1997	2002
<b>Number of local governments</b>	78,218	79,862	81,780	83,186	84,955	87,453	87,525

- a. Write an equation that models the number of local governments as a function of the number of years since 1972.
- b. Do you expect the trend described by the equation to continue indefinitely? *Explain.*
11. **Saturn's Moons** The table shows a moon's mean distance from Saturn, the moon's diameter, and the number of days it takes the moon to orbit Saturn.

<b>Moon</b>	Mimas	Janus	Tethys	Prometheus	Titan
<b>Mean distance (km)</b>	185,520	151,470	294,660	139,350	1,221,830
<b>Days of orbit</b>	0.94	0.6945	1.88	0.6139	15.94
<b>Diameter (km)</b>	392	178	1060	92	5150

- a. Make a scatter plot where  $x$  is the number of days of orbit and  $y$  is the mean distance from Saturn. Make another scatter plot where  $x$  is the number of days of orbit and  $y$  is the diameter of the moon.



- b. Draw conclusions about the data.