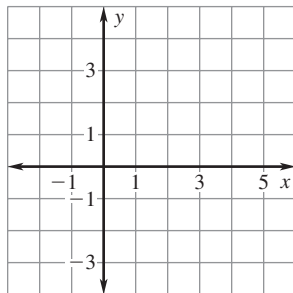


**LESSON**  
**5.7****Practice B***For use with pages 334–342*

**Make a scatter plot of the data. Find the equation of the best-fitting line.**  
**Approximate the value of  $y$  for  $x = 3$ .**

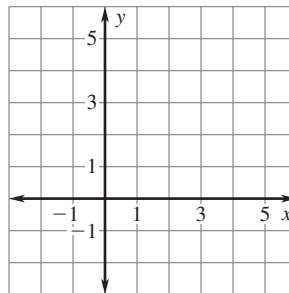
1.

$x$	-1	0	1	2	4
$y$	3	3	1	0	-3



2.

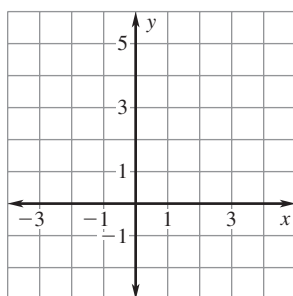
$x$	-1	0	1	2	4
$y$	-1	1	2	1	5



**Make a scatter plot of the data. Find the equation of the best-fitting line.**  
**Approximate the value of  $y$  for  $x = 5$ .**

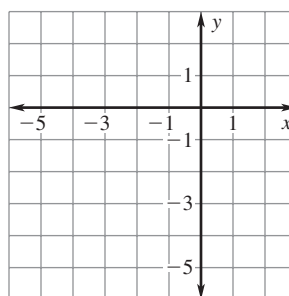
3.

$x$	-1	0	1	2	3
$y$	5	3	2	0	-2



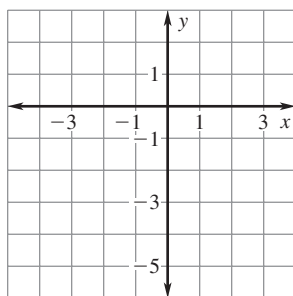
4.

$x$	-5	-3	-1	1	2
$y$	-4	-2	-1	1	0



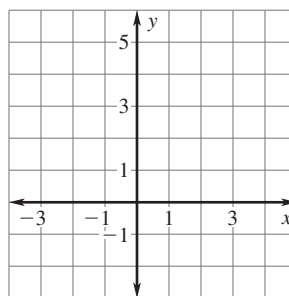
5.

$x$	-2	-1	0	1	2
$y$	-4	-2	-1	-1	1



6.

$x$	-1	0	1	2	3
$y$	-2	0	1	3	5



Name \_\_\_\_\_

Date \_\_\_\_\_

**LESSON**  
**5.7****Practice B** *continued*  
*For use with pages 334–342***Find the zero of the function.**

**7.**  $f(x) = 16x - 4$

**8.**  $f(x) = 2 - 4x$

**9.**  $f(x) = 0.5x + 5$

**10.**  $f(x) = -0.1x - 3$

**11.**  $f(x) = \frac{3}{4}x - 3$

**12.**  $f(x) = -\frac{2}{5}x + 4$

**13.**  $f(x) = 0.25x + 0.5$

**14.**  $f(x) = 9 - 0.7x$

**15.**  $f(x) = 1.2x + 10$

**16.**  $f(x) = \frac{1}{2}x - 6$

**17.**  $f(x) = -\frac{2}{5}x - 4$

**18.**  $f(x) = -0.8x + 15$

**19.**  $f(x) = 1.25x - 5$

**20.**  $f(x) = 6 - 0.2x$

**21.**  $f(x) = 2.5x - 3$

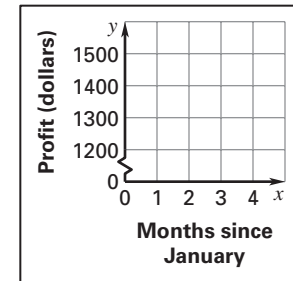
**LESSON**  
**5.7****Practice B** *continued*  
*For use with pages 334–342*

- 22. Profit**
- The table shows the monthly profit of a small company.

Month	January	February	March	April	May
Profit (dollars)	1200	1250	1400	1380	1450

- a. Make a scatter plot of the data. Let  $x$  represent the number of months since January and let  $y$  represent the profit.

- b. Find an equation that models the profit (in dollars) as a function of the number of months since January.



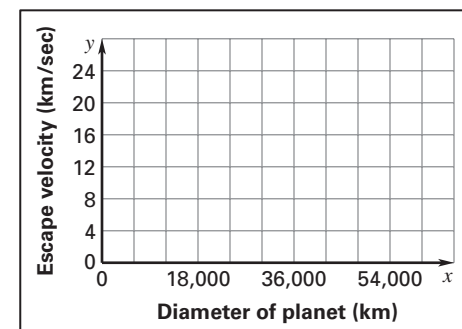
- c. Approximate the profit in August.

- 23. Escape Velocity** The table shows several planet diameters and escape velocities. The escape velocity is the velocity at which an object has to travel in order to escape the effect of a planet's gravity.

Planet	Mercury	Uranus	Earth	Mars	Venus
Diameter (km)	4879	51,118	12,756	6794	12,104
Escape velocity (km/sec)	4.3	21.3	11.186	5.03	10.36

- a. Make a scatter plot of the data. Let  $x$  represent the diameter of the planet and let  $y$  represent the escape velocity.

- b. Find an equation that models the escape velocity (in kilometers per second) as a function of the diameter (in kilometers).



- c. Approximate the escape velocity of Neptune, which has a diameter of 49,528 kilometers.