

**LESSON** **Practice B**  
**2-4** **Writing Linear Functions**

Find the slope of each line.

1. 

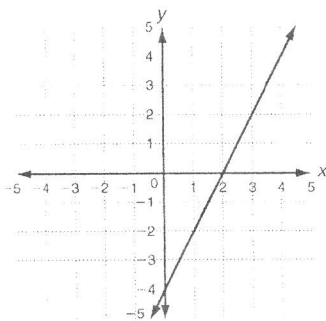
<i>x</i>	-5	1	4	9
<i>y</i>	-9	3	9	19

2. 

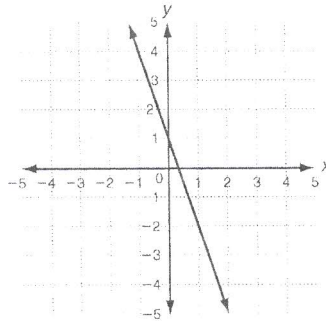
<i>x</i>	-7	-2	6	13
<i>y</i>	-0.5	2	6	9.5

Write the equation of each line in slope-intercept form.

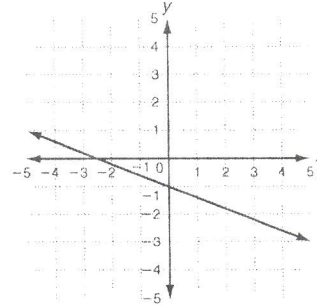
3.



4.



5.



6. line passing through  $(-3, -4)$   
 with a slope of  $\frac{1}{5}$

7. 

<i>x</i>	-2	3	8	11
<i>y</i>	-1	1.5	4	5.5

8. line parallel to  $y = -\frac{3}{2}x + 4$   
 and through  $(1, 5)$

9. line perpendicular to  $y = -2x + 11$   
 and through  $(4, -2)$

**Solve.**

10. The pool at the Barnes Community Center is heated. The table shows the temperature of the water at various time intervals after the heater is turned on.

a. Express the temperature of the water as a function of time.

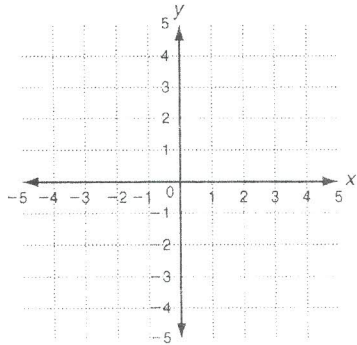
b. Find the temperature of the water after 12 hours.

Swimming Pool Heater	
Time ( <i>h</i> )	Temperature ( <i>T</i> )
0	56°F
3	62°F
5	66°F
9	74°F

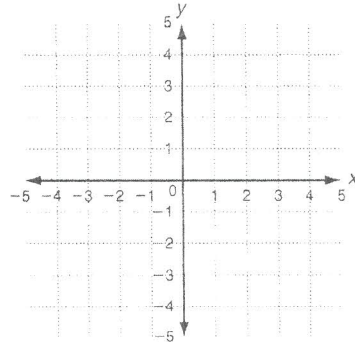
**LESSON** **Practice B**  
**2-5** *Linear Inequalities in Two Variables*

Graph each inequality.

1.  $y < x + 2$

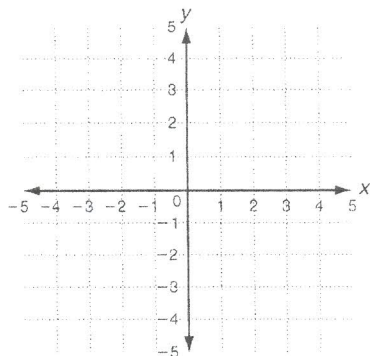


2.  $y \geq 3x - 5$

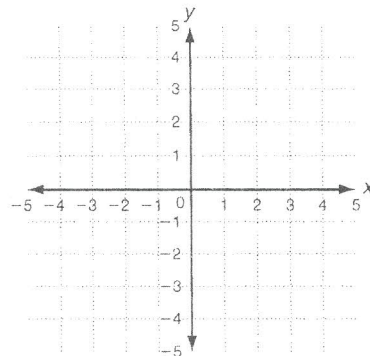


Solve each inequality for  $y$ . Graph the solution.

3.  $-2(3x + 2y - 3) \geq 12$



4.  $\frac{-x}{5} + \frac{2y}{3} > 0$



Solve.

5. Marcus volunteers to work at a carnival booth selling raffle tickets. The tickets cost \$2 each or 3 for \$5. His goal is to have at least \$250 in sales during his shift.

a. Let  $x$  be the number of tickets sold for \$2 each. Let  $y$  be the number of tickets sold in sets of 3 for \$5. Write and graph an inequality for the total number of tickets Marcus must sell to meet his goal.

b. If Marcus sells 75 tickets for \$2 each, what is the least number of tickets he must sell in sets of 3 to meet his goal?

