Name\_

Period and Class

Solve each equation.

1) 
$$5 + \frac{v}{2} = -2$$
  
2)  $18 = -3(x+2)$   
3)  $v + 3 = 3 + v$   
4)  $\frac{|6+p|}{2} = 5$ 

Solve each equation for the indicated variable.

5) 6x + 7y = -35 for y

Solve each inequality and graph its solution.

6)  $\frac{v}{2} < -10$   $\xrightarrow{-24} -22 -20 -18 -16 -14$ 7)  $n + 4 \ge 6$  $\xrightarrow{-5 -4 -3 -2 -1 \ 0 \ 1 \ 2 \ 3 \ 4 \ 5}$ 

Solve each compound inequality and graph its solution.

8) -9 < 1 + 2r < 5-8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4

Solve each inequality and graph its solution.

9) 
$$|v| < 3$$
  
10) Evaluate the function:  
 $f(x) = 6x + 11$  for  $x = 7$ 

- 11) Find the value of x so that the function has the given value:f(x) = 7x 4 ; f(x) = -18
- 12) Find the intercepts of:

4x + 5y = 16

Find the slope of the line through each pair of points.

13) (3, 18), (11, -19)

## Write the slope-intercept form of the equation of the line through the given points.

14) through: (1, -5) and (0, -3)

Write the point-slope form of the equation of the line through the given point with the given slope.

15) through: (-3, -2), slope =  $\frac{2}{3}$ 

Write the point-slope form of the equation of the line described.

16) through: (-2, 4), parallel to  $y = -\frac{1}{7}x + 2$ 

Solve each system by substitution.

17) 
$$-5x + y = 17$$
  
 $6x - 6y = -6$ 

Solve each system by elimination.

18) 
$$-6x + 2y = 2$$
  
 $-3x - 4y = 11$ 

Sketch the graph of each linear inequality.



Sketch the graph of each function.

