

## Homework 4.3

Date \_\_\_\_\_

**Solve each equation.**

1)  $-17 + 3r = 5(2r + 5)$

2)  $-5(-4 - 5m) = -3m - 8$

3)  $3(5x - 4) + 2x = 27 + 4x$

4)  $15 + 5x = -(1 + 3x)$

5)  $-6.5(k + 3.1) = -7.8k - 11.18$

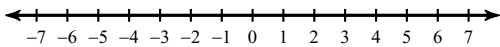
6)  $4(-7.4 + 0.2k) = -1.87 - 5.1k$

7)  $5.8(x + 6.5) = 6.34 - 1.2x$

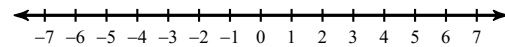
8)  $1.72 + 7.3b = 7.3(7.5b + 0.7) + 6.1$

**Draw a graph for each inequality.**

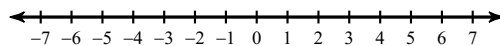
9)  $-n \leq 5$



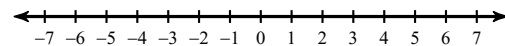
10)  $n \geq -6$



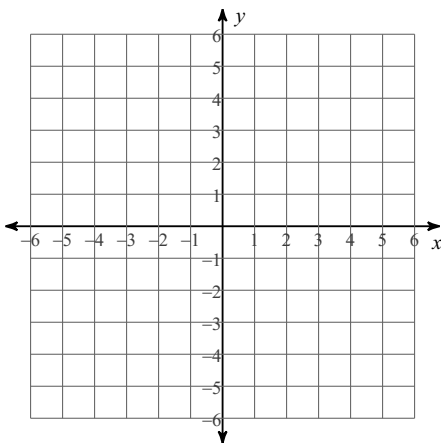
11)  $r < -4$



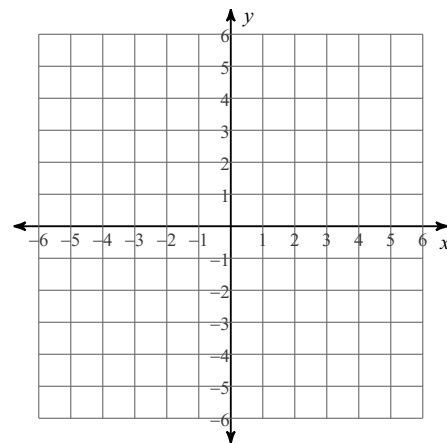
12)  $-k \leq -2$

**Sketch the graph of each linear inequality.**

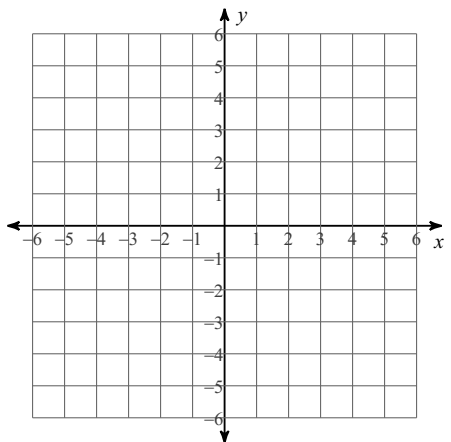
13)  $y < x$



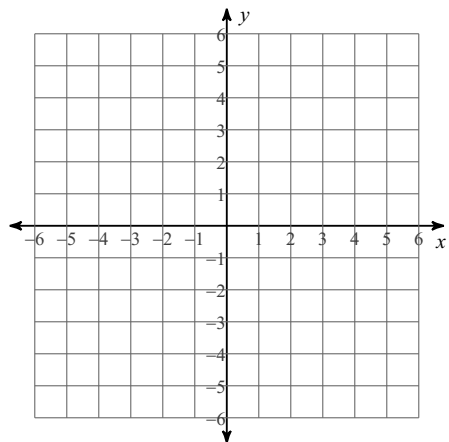
14)  $y \leq 7x + 2$



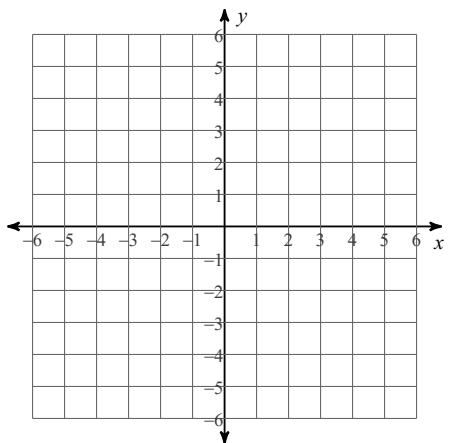
$$15) y < \frac{1}{4}x - 4$$



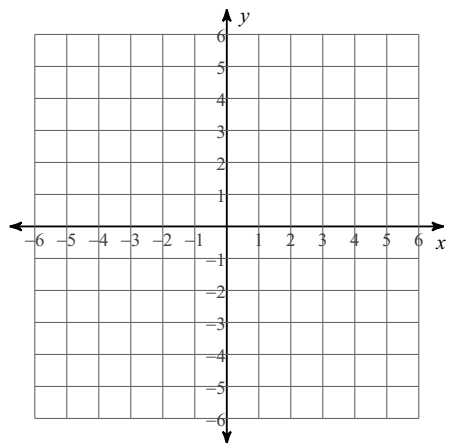
$$16) y < -\frac{10}{3}x - 5$$



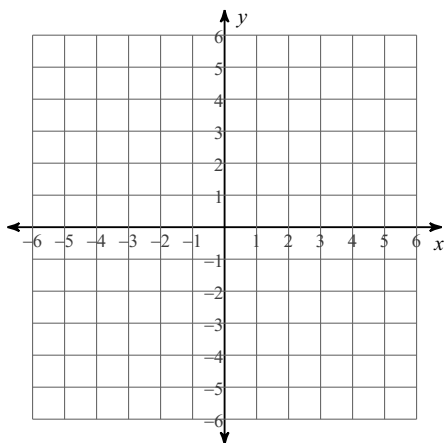
$$17) x - 5y > -20$$



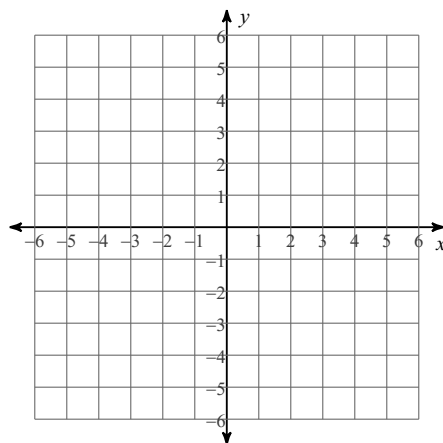
$$18) 7x + 5y \geq 15$$



19)  $x - y > -4$



20)  $9x + 2y > 8$



**Solve each equation for the indicated variable.**

21)  $z = \frac{xy}{m}$ , for  $x$

22)  $z = a - m + b$ , for  $a$

23)  $xk = w - v$ , for  $x$

24)  $g = cab$ , for  $a$

25)  $x - c = d + r$ , for  $x$

26)  $x - c = d - r$ , for  $x$

27)  $g = -b + \frac{c}{a}$ , for  $a$

28)  $z = a + m - b$ , for  $a$

29)  $z = mx + y$ , for  $x$

30)  $kx = v + w$ , for  $x$