

Final Review 1

Solve each equation.

1) $x + 1 = -14$

2) $a - 10 = -20$

3) $-20 = \frac{x}{18}$

4) $6x = -12$

5) $76 = 5m + 1$

6) $-12 = -10 + \frac{x}{2}$

7) $-3(6 + b) = -12$

8) $4p + 7 = 75$

9) $192 = 8(2 + 2a) + 6a$

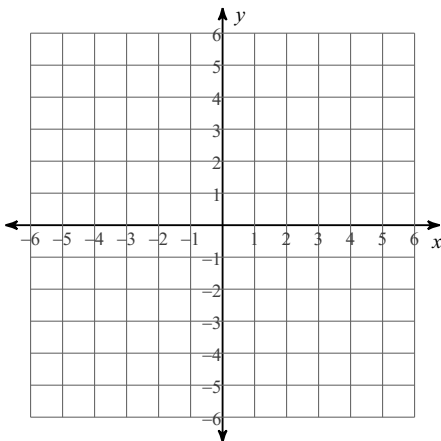
10) $-294 = -6(1 + 6x)$

11) $-4(2m - 7) = 21 - 8m$

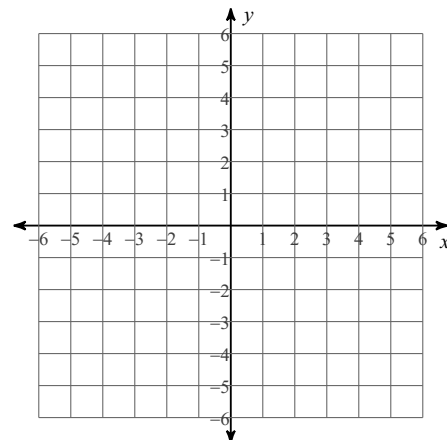
12) $5(x + 2) = 12 + 3x$

Sketch the graph of each line.

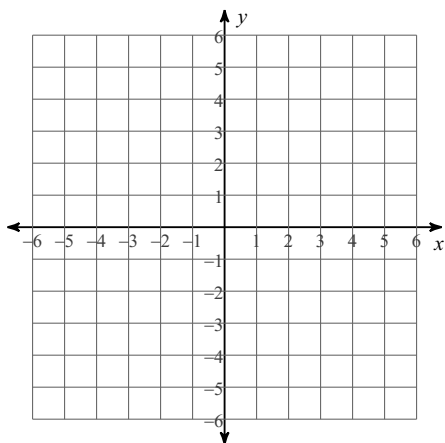
13) $y = -\frac{8}{5}x + 3$



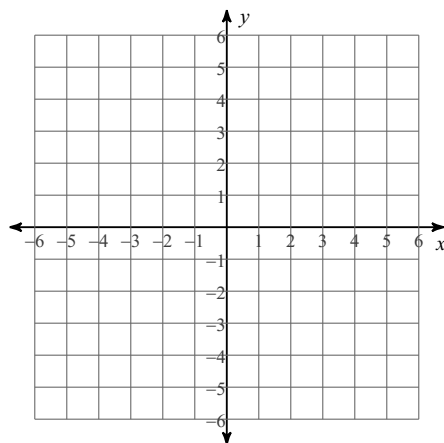
14) $y = -4$



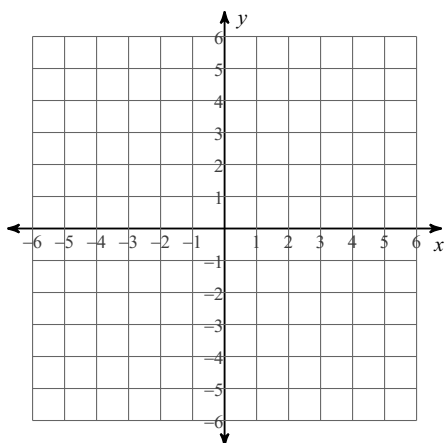
15) $2x + y = 0$



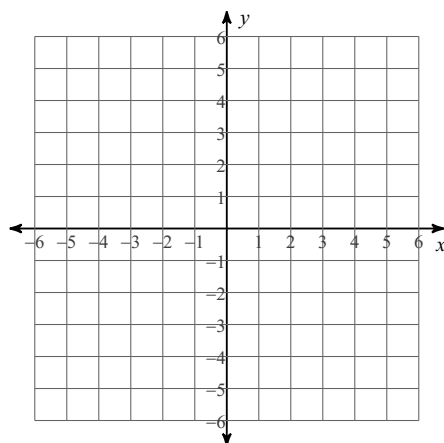
16) $x - y = -1$



17) $-3 - y = -x$



18) $-6x - 6 = 3y$



Solve each equation for the indicated variable.

19) $\frac{x}{m} = \frac{n}{p}$, for x

20) $g = \frac{ac}{b}$, for a

21) $g = y - x + c$, for x

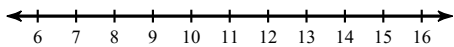
22) $z = b + a - m$, for a

23) $m - x = p + n$, for x

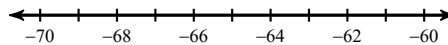
24) $z = \frac{ma}{b}$, for a

Solve each inequality and graph its solution.

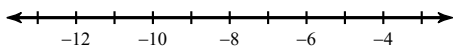
25) $-182 < -13x$



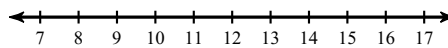
26) $\frac{m}{8} \geq -8$



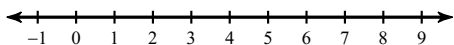
27) $p + 6 < 1$



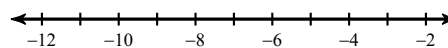
28) $p - 11 \geq -1$



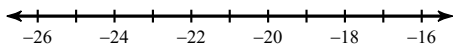
29) $\frac{p}{2} - 1 \leq 1$



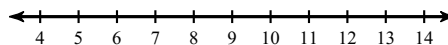
30) $24 < -6 - 6n$



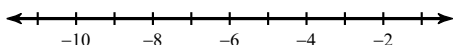
31) $4(n - 5) \leq -96$



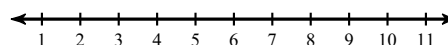
32) $-39 > -3(2 + m)$



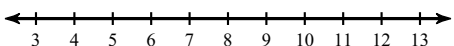
33) $5 - 5(n - 8) \geq 85$



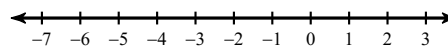
34) $8(8v + 6) < 496$



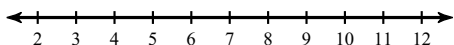
35) $7k - 2(7k - 2) < -4 - 6k$



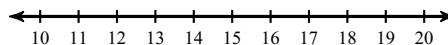
36) $8r + 6(6 + 6r) \leq -40 + 6r$



37) $-20 + 5b \leq -5 + 5(b - 3)$

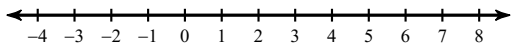


38) $-11 + 4b \geq 4(b - 2)$

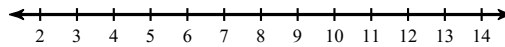


Solve each compound inequality and graph its solution.

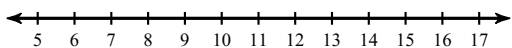
39) $\frac{r}{5} \leq 0$ or $-2r \leq -2$



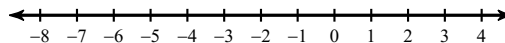
40) $-14 \leq -2v \leq -10$



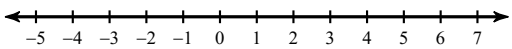
41) $m - 10 \leq -2$ or $\frac{m}{10} \geq 1$



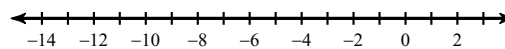
42) $3 < n + 8 \leq 10$



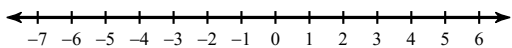
43) $-9 \leq 4m - 5 \leq 15$



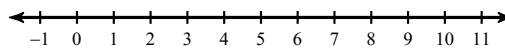
44) $7 - 5n > 57$ or $6 - 10n \leq 26$



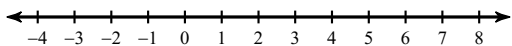
45) $2r + 7 < 1$ or $-1 + 8r \geq 23$



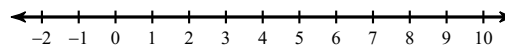
46) $-2 \leq 4 - 2x < 0$



47) $-r - 6 < 3$ or $3r + 1 < -2$

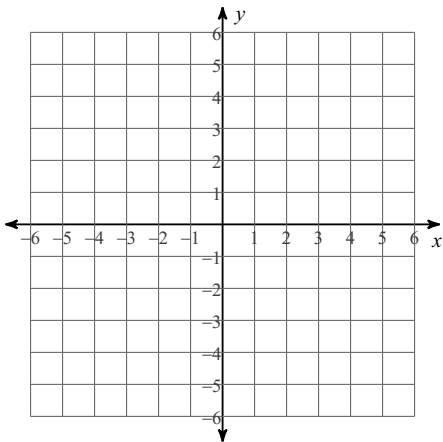


48) $5v - 9 \leq 21$ or $7v + 6 \leq -64$

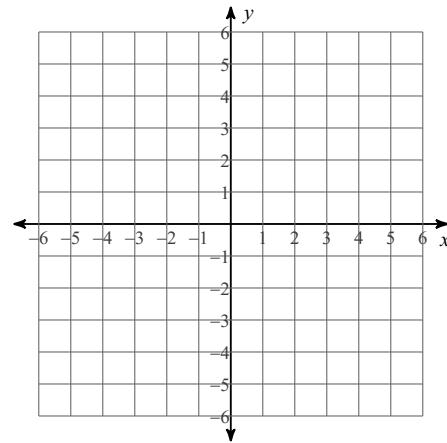


Sketch the graph of each linear inequality.

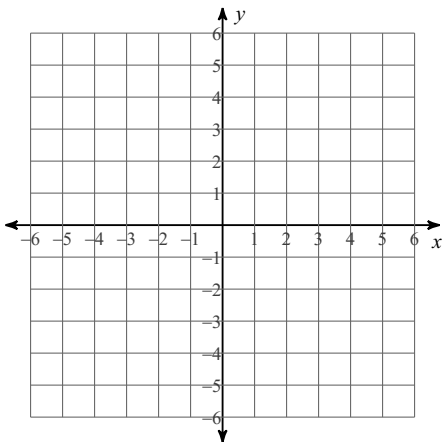
49) $y \geq 2x - 4$



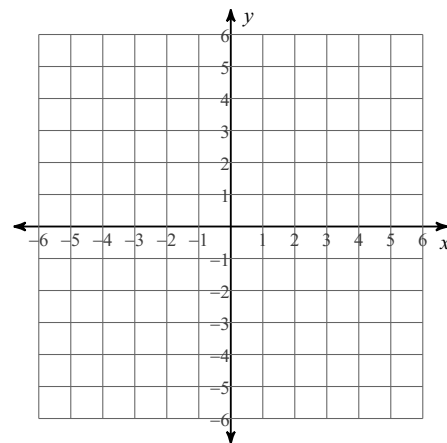
50) $y \leq -\frac{1}{2}x - 3$



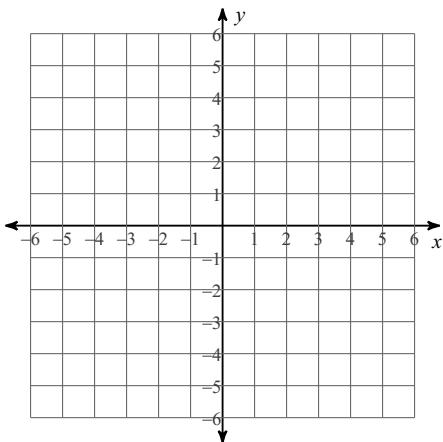
51) $y < \frac{3}{2}x - 1$



52) $x < 2$



53) $2x - 5y < -10$



54) $8x + 3y \geq 15$

