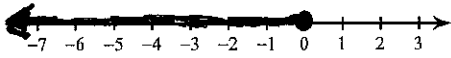


A7 Inequalities Review

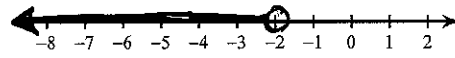
Solve each inequality and graph its solution.

1) $0 \geq 2a + 2a$



$0 \geq 4a$
 $0 \geq a$ $a \leq 0$

2) $4k + 5k < -18$



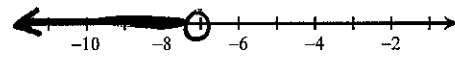
$9k < -18$
 $k < -2$

3) $-3(3 + 3p) < -81$



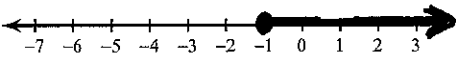
$-9 - 9p < -81$
 $-9p < -72$ $p > 8$

4) $4(-5x - 4) > 124$



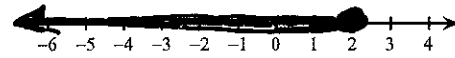
$-5x - 4 > 31$
 $-5x > 35$ $x < -7$

5) $3n - 4 \leq n + 3(4 + 6n)$



$3n - 4 \leq n + 12 + 18n$
 $-16 \leq 16n$ $n \geq -1$

6) $-3(-8 - 2m) \leq 5m + 26$



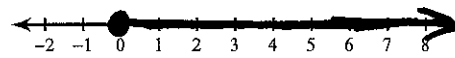
$24 + 6m \leq 5m + 26$
 $m \leq 2$

7) $4(r - 2) - 5(r + 1) > r - 6 - 5$



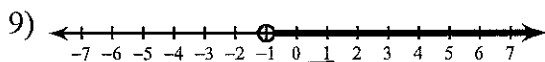
$4r - 8 - 5r - 5 > r - 11$ $-2r > 2$
 $-r - 13 > r - 11$ $r < -1$

8) $6(1 - 2x) \leq 2(x + 3)$

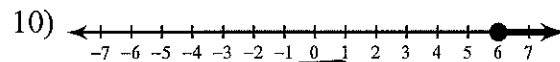


$6 - 12x \leq 2x + 6$
 $0 \leq 14x$ $x \geq 0$

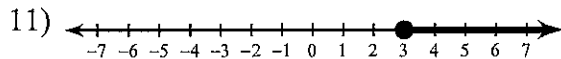
Write an inequality for each graph.



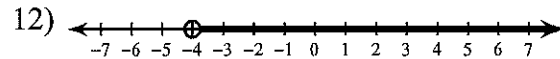
$x > -1$



$x \geq 6$



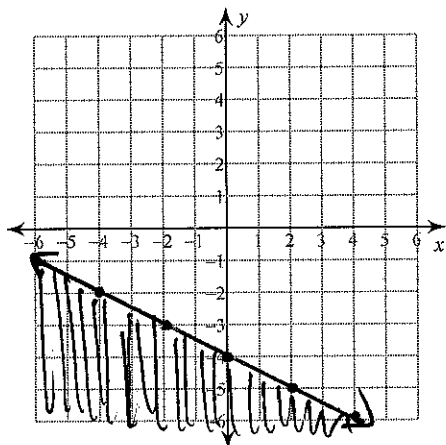
$x \geq 3$



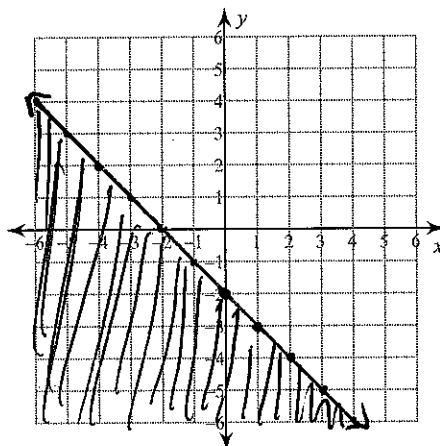
$x > -4$

Sketch the graph of each linear inequality.

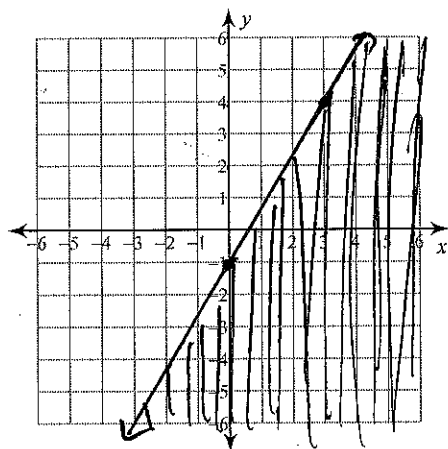
13) $y \leq -\frac{1}{2}x - 4$



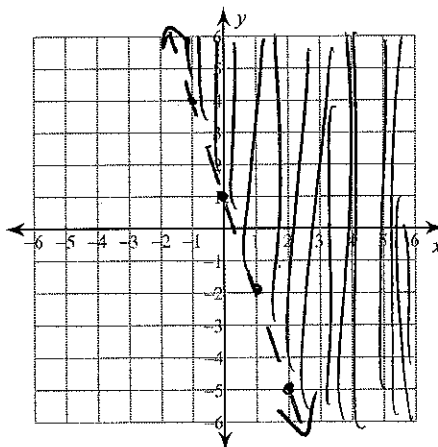
14) $y \leq -x - 2$



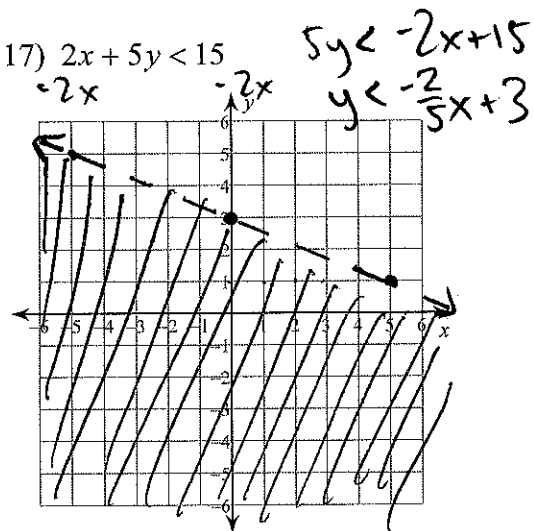
15) $y \leq \frac{5}{3}x - 1$



16) $y > -3x + 1$



17) $2x + 5y < 15$



18) $3x - y \geq -2$

