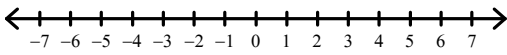


Inequalities on the number line

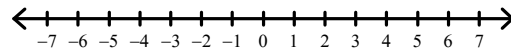
Date _____

Draw a graph for each inequality.

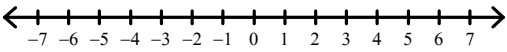
1) $b < 4$



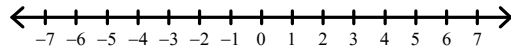
2) $-3 \leq n$



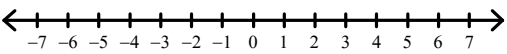
3) $2 < k$



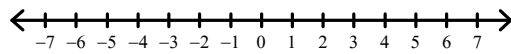
4) $k \leq -5$



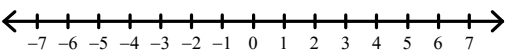
5) $x < -5$



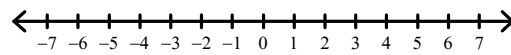
6) $-4 \geq k$



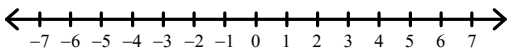
7) $-4 \leq x$



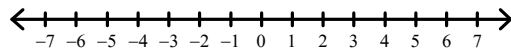
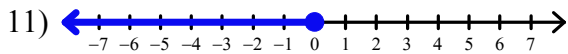
8) $n \leq -4$



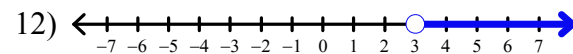
9) $1 > n$



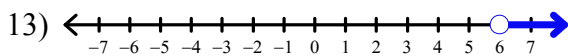
10) $-1 > x$

**Write an inequality for each graph.**

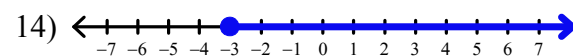
11) _____



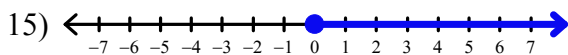
12) _____



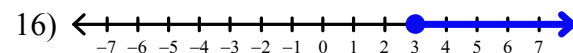
13) _____



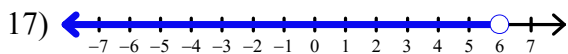
14) _____



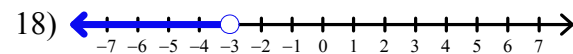
15) _____



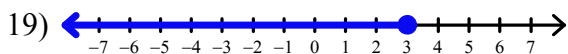
16) _____



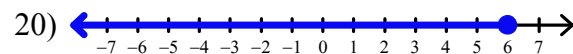
17) _____



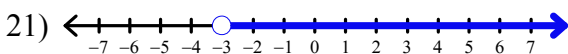
18) _____



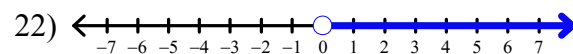
19) _____



20) _____



21) _____



22) _____

Solve each inequality.

23) $10(-6 + n) > -150$

24) $51 \leq 5x - 9$

25) $6 < 3(8 + m)$

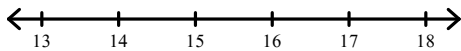
26) $-4 + 2(p - 8) < -36$

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

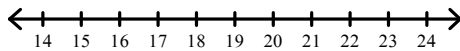
28) $-3(4n + 1) < -6(2n - 6)$

Solve each inequality and graph its solution.

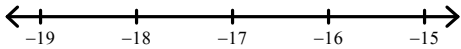
29) $5 < \frac{r + 9}{5}$



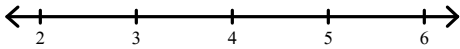
30) $\frac{-10 + m}{3} < 3$



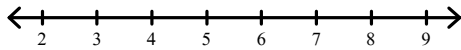
31) $-1 + 9n \leq -154$



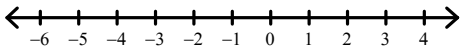
32) $-1 \leq 3 - x$



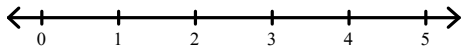
33) $3(6a - 8) \geq 48$



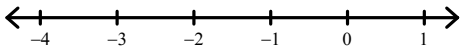
34) $12 > -4 - 8(-4k - 6)$



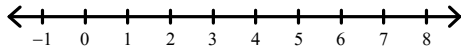
35) $63 < 4p - 3(-4p - 5)$



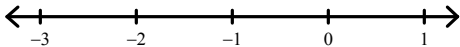
36) $-6(5 - 3x) \leq -66$



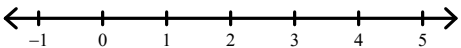
37) $6(n + 7) - 2(1 + 4n) \leq 34$



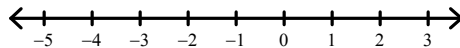
38) $-6(m + 5) + 8(3m + 3) \leq -24$



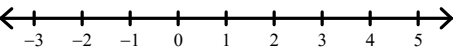
39) $51 \leq 3(7x - 2) + 3(x - 5)$



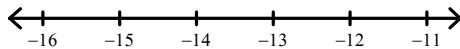
40) $7(1 - 7r) - 8(3 + 3r) < 56$



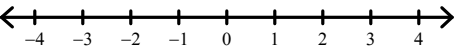
41) $5v - v > -3(v - 2) - 2(3v + 3)$



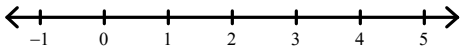
42) $-(4 + 3b) + 6b \leq 6 + 4(1 + b)$



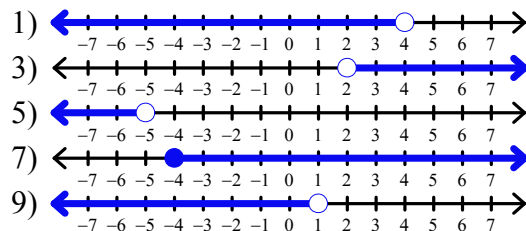
43) $7(x - 1) + 7(1 - 5x) < 6x + x$



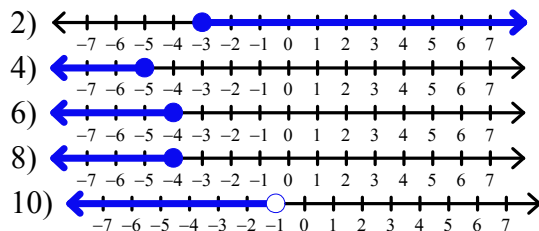
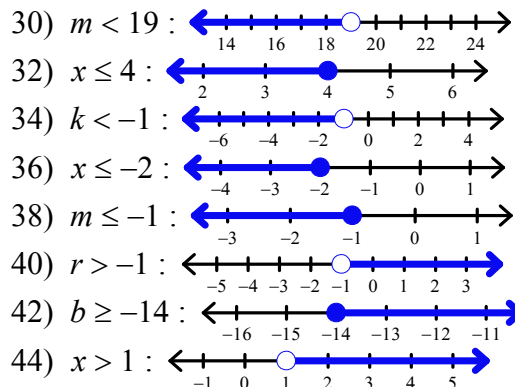
44) $3(6 - 6x) < 4(x - 1)$



Answers to Inequalities on the number line



- 11) $k \leq 0$ 12) $x > 3$
 15) $b \geq 0$ 16) $x \geq 3$
 19) $p \leq 3$ 20) $n \leq 6$
 23) $n > -9$ 24) $x \geq 12$
 27) $x > 16$ 28) { All real numbers. }



- 13) $x > 6$ 14) $b \geq -3$
 17) $x < 6$ 18) $a < -3$
 21) $n > -3$ 22) $r > 0$
 25) $m > -6$ 26) $p < -8$

