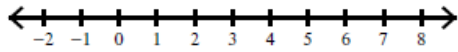


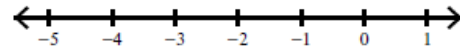
Solving Inequalities

Solve each inequality and graph its solution.

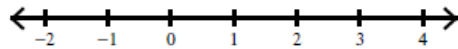
1) $0 > 3x - 3 - 6$



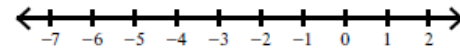
2) $4x + 1 - 1 \geq -8$



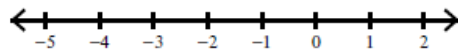
3) $-1 \leq 2n + 4 - 5$



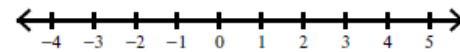
4) $-6 > 5n + 5 + 4$



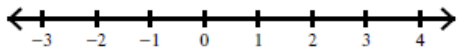
5) $0 \leq 2n + 3n$



6) $2p - 4p \leq -2$



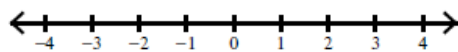
7) $7 < -(-k - 3) + 2$



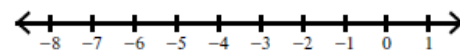
8) $3 - 2(n - 4) > -1$



9) $-5(1 - 4a) > -5$



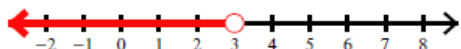
10) $-2(b + 1) + 4 < 10$



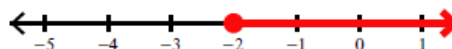
Answers

Solve each inequality and graph its solution.

1) $0 > 3x - 3 - 6$



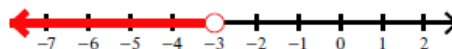
2) $4x + 1 - 1 \geq -8$



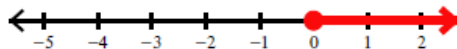
3) $-1 \leq 2n + 4 - 5$



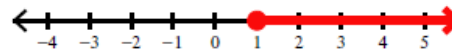
4) $-6 > 5n + 5 + 4$



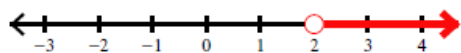
5) $0 \leq 2n + 3n$



6) $2p - 4p \leq -2$



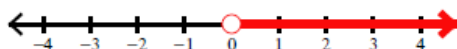
7) $7 < -(-k - 3) + 2$



8) $3 - 2(n - 4) > -1$



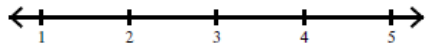
9) $-5(1 - 4a) > -5$



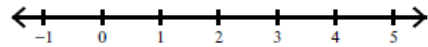
10) $-2(b + 1) + 4 < 10$



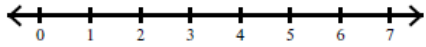
$$11) a - 15 > -4(-6 + 3a)$$



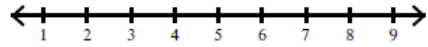
$$12) 3(6b - 1) > 18 - 3b$$



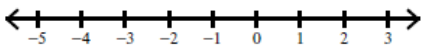
$$13) 26 + m \geq 5(-6 + 3m)$$



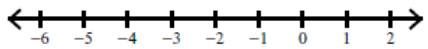
$$14) 20 - 2p > -2(p + 2) + 4p$$



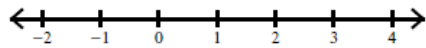
$$15) x + 1 + 1 + 6x > 3(x - 4) - (x - 4)$$



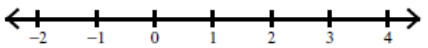
$$16) -6(1 + 6x) < 6(1 - 5x)$$



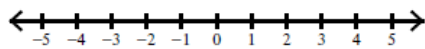
$$17) 2(1 - 4r) < -2(r + 3) - 4$$



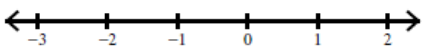
$$18) -6(1 + 2x) \geq 6(2x - 1) + 2x$$



$$19) -2(1 - 5x) > -(x + 1) - 1$$



$$20) 5x - (x + 2) > -5(1 + x) + 3$$



Critical thinking questions:

21) Write an inequality with x on both sides whose solution is $x \geq 2$

22) Name one particular solution to question #20.

Answers

11) $a - 15 > -4(-6 + 3a)$



12) $3(6b - 1) > 18 - 3b$



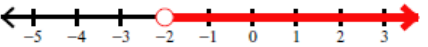
13) $26 + m \geq 5(-6 + 3m)$



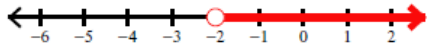
14) $20 - 2p > -2(p + 2) + 4p$



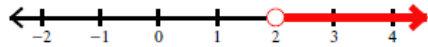
15) $x + 1 + 1 + 6x > 3(x - 4) - (x - 4)$



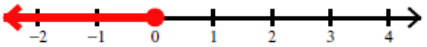
16) $-6(1 + 6x) < 6(1 - 5x)$



17) $2(1 - 4r) < -2(r + 3) - 4$



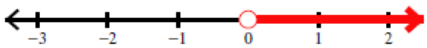
18) $-6(1 + 2x) \geq 6(2x - 1) + 2x$



19) $-2(1 - 5x) > -(x + 1) - 1$



20) $5x - (x + 2) > -5(1 + x) + 3$



Critical thinking questions:

21) Write an inequality with x on both sides whose solution is $x \geq 2$

Many answers. Ex: $2x \geq x + 2$

22) Name one particular solution to question #20.

Any number greater than zero. Ex: 4.7