

Solving Practice Quiz

Solve each equation.

1) $11(2p + 12) + 3 = 39 - 10p$

2) $58 - 4x = x + 7(10 + x)$

3) $17 + 6n = -12 - (1 - 3n)$

4) $-6 + 9(7 + 5x) = 57 + 11x$

5) $-n - 5(5n + 2) = -12(n - 5)$

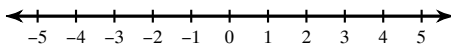
6) $-2(1 + 11x) = -2(11x + 4)$

7) $-7(1 - 5x) + 8(9x - 10) = 12 + 8x + 1 - x$

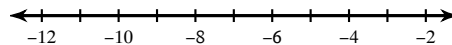
8) $-12(x - 6) - 2 = 12 - 10(x - 7)$

Solve each inequality and graph its solution.

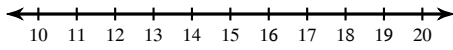
9) $-7(4n - 8) < 10 - 5n$



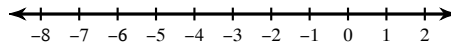
10) $5(1 - 2k) \leq 30 - 5k$



$$11) 6a - 8 \leq 2(3a - 4)$$

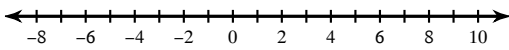


$$12) 4r - 33 \leq -3 + 2(8r + 3)$$

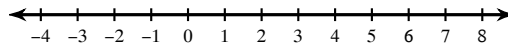


Solve each compound inequality and graph its solution.

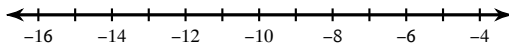
$$13) -46 < 3 - 7k < 38$$



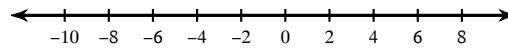
$$14) 2 \leq 2x - 2 \leq 4$$



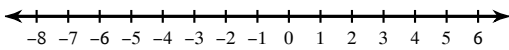
$$15) 4p + 2 \geq -34 \text{ or } 2 + 2p \leq -18$$



$$16) 5b - 1 > 24 \text{ or } -10b + 8 \geq 88$$



$$17) 7 \leq 3n - 8 \leq 4$$



Answers to Solving Practice Quiz

1) $\{-3\}$

2) $\{-1\}$

3) $\{-10\}$

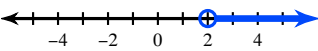
4) $\{0\}$

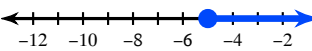
5) $\{-5\}$

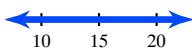
6) No solution.

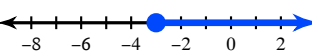
7) $\{1\}$

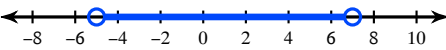
8) $\{-6\}$

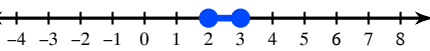
9) $n > 2$:  A number line with tick marks at -4, -2, 0, 2, 4. An open circle is at 2, and a blue arrow points to the right from 2.

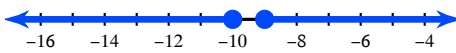
10) $k \geq -5$:  A number line with tick marks at -12, -10, -8, -6, -4, -2. A closed circle is at -5, and a blue arrow points to the right from -5.

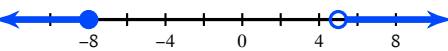
11) $\{ \text{All real numbers.} \}$:  A number line with tick marks at 10, 15, 20. A blue arrow points to the right from 10.

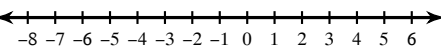
12) $r \geq -3$:  A number line with tick marks at -8, -6, -4, -2, 0, 2. A closed circle is at -3, and a blue arrow points to the right from -3.

13) $-5 < k < 7$:  A number line with tick marks at -8, -6, -4, -2, 0, 2, 4, 6, 8, 10. Open circles are at -5 and 7, and a blue arrow points to the right between -5 and 7.

14) $2 \leq x \leq 3$:  A number line with tick marks at -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8. Closed circles are at 2 and 3, and a blue arrow points to the right between 2 and 3.

15) $p \geq -9$ or $p \leq -10$:  A number line with tick marks at -16, -14, -12, -10, -8, -6, -4. Closed circles are at -9 and -10, and blue arrows point to the right from -9 and to the left from -10.

16) $b > 5$ or $b \leq -8$:  A number line with tick marks at -8, -4, 0, 4, 8. A closed circle is at -8 with an arrow pointing left, and an open circle is at 5 with an arrow pointing right.

17) No solution. :  A number line with tick marks at -8, -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6. No solution is shown.