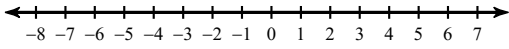


Solving Inequalities & Equations

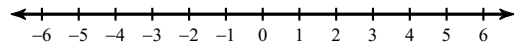
Date _____ Period _____

Solve each inequality and graph its solution.

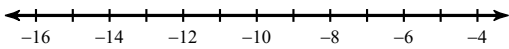
1) $-8 \left| \frac{v}{3} \right| + 8 \geq -8$



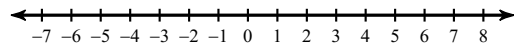
2) $-5 - 8 \left| -3a \right| \leq -53$



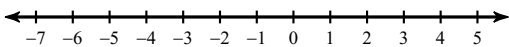
3) $-10 \left| n + 7 \right| + 1 > -9$



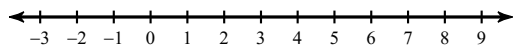
4) $3 - 3 \left| \frac{v}{6} \right| \leq 1$

**Solve each compound inequality and graph its solution.**

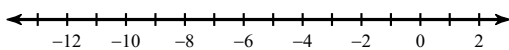
5) $2x - 8 < 5x + 4 \leq -4 - 3x$



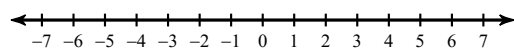
6) $1 - 2b \leq 3 - 3b < 10b - 10$



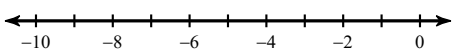
7) $4n + 10 \leq 2n - 8$ or $-n - 1 \leq 9 + 9n$



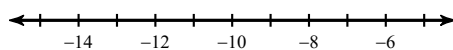
8) $5v - 4 < 7v - 10$ or $2 - 4v < -2 - 5v$

**Solve each inequality and graph its solution.**

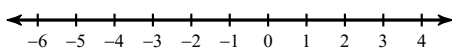
9) $-40 + 2a < -7 + 3(3a - 4)$



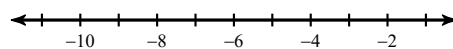
10) $4r - 22 \leq 5(r - 3)$



11) $-6x - 2 < 3 - (6x - 3)$



12) $-(8x - 2) - 1 \geq 19 - 5x$

**Solve each equation.**

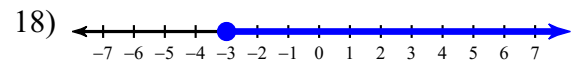
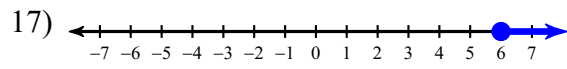
13) $-|x - 10| - 8 = -18$

14) $6 - 4 \left| \frac{x}{8} \right| = 8$

$$15) 8 \left| \frac{x}{5} \right| - 4 = 12$$

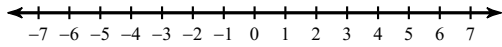
$$16) 9 - 8 \left| -3x \right| = 9$$

Write an inequality for each graph.

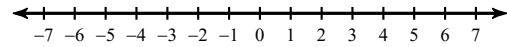


Draw a graph for each inequality.

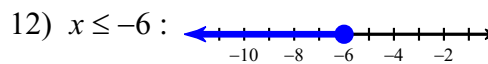
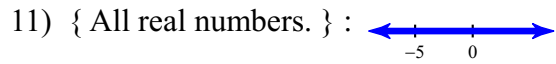
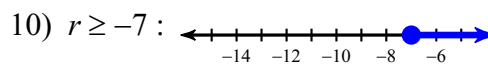
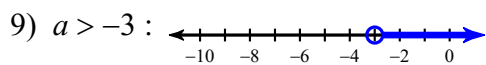
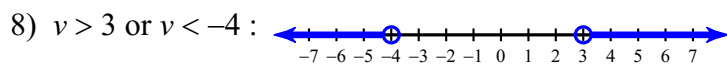
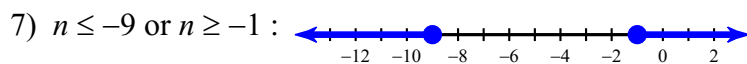
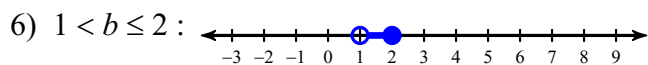
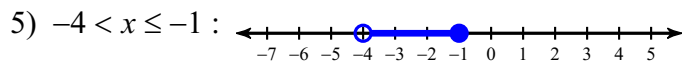
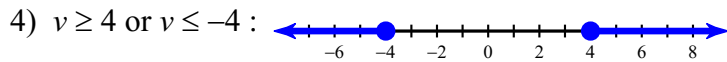
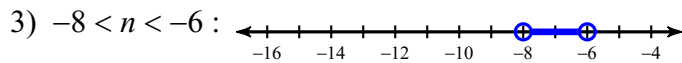
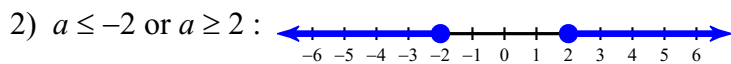
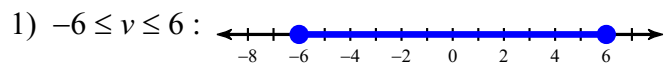
19) $5 \leq x$



20) $p < 2$



Answers to Solving Inequalities & Equations (ID: 1)



13) $\{20, 0\}$

14) No solution.

15) $\{10, -10\}$

16) $\{0\}$

17) $k \geq 6$

18) $n \geq -3$

