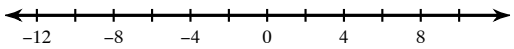
Algebra 2 Test #2 Review Name_____

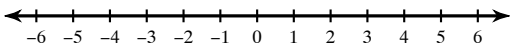
Solving Compound Ineq; Absolute Value Ineq; Radical Ineq;Quad EQs w/Factoring

Solve each inequality and graph its solution.

1) $\left|-9b - 8\right| + 6 \geq 68$



2) $\left|-1 - 3x\right| + 10 < 14$



Solve each equation.

3) $9\left|4r + 3\right| = \left|9r\right|$

4) $\dfrac{\left|n - 6\right|}{8} = \left|n\right|$

Solve each equation by factoring.

5) $n^2 - 7n + 14 = 2$

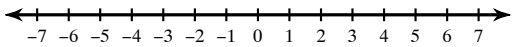
6) $x^2 + 8x + 20 = 8$

7) $m^2 - 14m + 44 = -5$

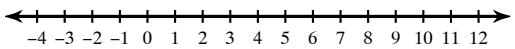
8) $k^2 - 2k + 21 = 8k$

Solve each compound inequality and graph its solution.

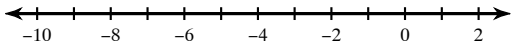
9) $-54 \leq 6 - 10x \leq 66$



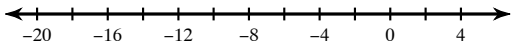
10) $-8a + 4 < -68$ or $7a + 2 \leq 2$



11) $-\dfrac{9}{14} \leq 8p + \dfrac{1}{2} < \dfrac{109}{10}$



12) $2x - 8 \geq 8 + 3x$ or $2x - 6 > -4 + x$



Solve each inequality.

13) $-6 > -7 + \sqrt{\dfrac{x}{8}}$

14) $3 < \sqrt{12 - b}$

15) $\sqrt[3]{k + 6} > 4$

16) $\sqrt[3]{3n - 8} - 1 < 2$