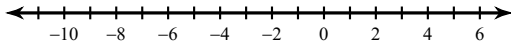


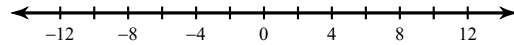
## 1.5 Abs. Value Inequalities WS

Solve each absolute value inequality and graph its solution. Write answer in interval notation.

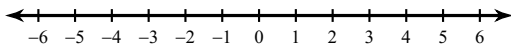
1)  $|5x + 10| < 30$



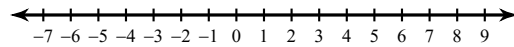
2)  $|-4a - 2| > 38$



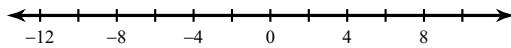
3)  $|-7 - 8m| < 15$



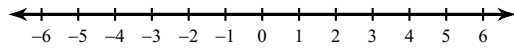
4)  $|9b - 10| \geq 37$



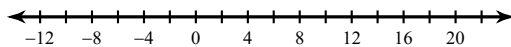
5)  $|9b + 9| \geq 72$



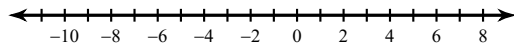
6)  $|-6p + 7| \leq 5$



7)  $|6 - n| > 13$

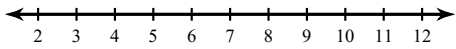


8)  $|10x + 7| \leq 73$

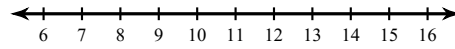


**Solve each inequality and graph its solution. Write answers in set-builder notation.**

9)  $-84 < -6(2 + 2x)$



10)  $-250 \geq 5(-2 - 6x)$



**Solve each equation. Remember to check for extraneous solutions.**

11)  $-1 + \sqrt{5v + 1} = \sqrt{4v - 3}$

12)  $\sqrt{-2 - 3n} = \sqrt{2 - n}$

**Solve each equation.**

13)  $5 = (4x + 25)^{\frac{1}{3}}$

14)  $-8 + x^{\frac{3}{2}} = 56$

**Solve each equation. Remember to check for extraneous solutions.**

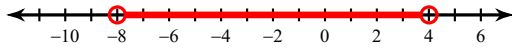
15)  $\frac{1}{n-4} = 1 - \frac{6}{n-4}$

16)  $1 - \frac{1}{3k-5} = \frac{k+5}{3k-5}$

## 1.5 Abs. Value Inequalities WS

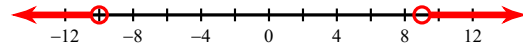
Solve each absolute value inequality and graph its solution. Write answer in interval notation.

1)  $|5x + 10| < 30$



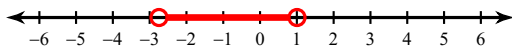
$-8 < x < 4$

2)  $|-4a - 2| > 38$



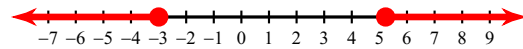
$a < -10 \text{ or } a > 9$

3)  $|-7 - 8m| < 15$



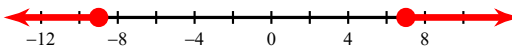
$-\frac{11}{4} < m < 1$

4)  $|9b - 10| \geq 37$



$b \geq \frac{47}{9} \text{ or } b \leq -3$

5)  $|9b + 9| \geq 72$



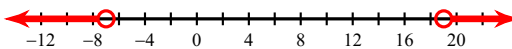
$b \geq 7 \text{ or } b \leq -9$

6)  $|-6p + 7| \leq 5$



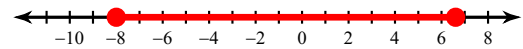
$\frac{1}{3} \leq p \leq 2$

7)  $|6 - n| > 13$



$n < -7 \text{ or } n > 19$

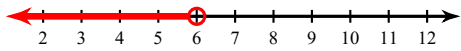
8)  $|10x + 7| \leq 73$



$-8 \leq x \leq \frac{33}{5}$

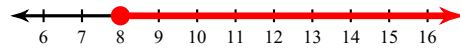
Solve each inequality and graph its solution. Write answers in set-builder notation.

9)  $-84 < -6(2 + 2x)$



$x < 6$

10)  $-250 \geq 5(-2 - 6x)$



$x \geq 8$

Solve each equation. Remember to check for extraneous solutions.

11)  $-1 + \sqrt{5v + 1} = \sqrt{4v - 3}$

$\{7, 3\}$

12)  $\sqrt{-2 - 3n} = \sqrt{2 - n}$

$\{-2\}$

Solve each equation.

13)  $5 = (4x + 25)^{\frac{1}{3}}$

$\{25\}$

14)  $-8 + x^{\frac{3}{2}} = 56$

$\{16\}$

Solve each equation. Remember to check for extraneous solutions.

15)  $\frac{1}{n-4} = 1 - \frac{6}{n-4}$

$\{11\}$

16)  $1 - \frac{1}{3k-5} = \frac{k+5}{3k-5} \quad \left\{ \begin{array}{l} 11 \\ 2 \end{array} \right\}$