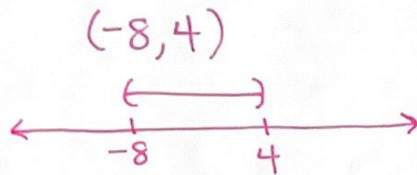
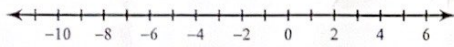


1.5 Abs. Value Inequalities WS

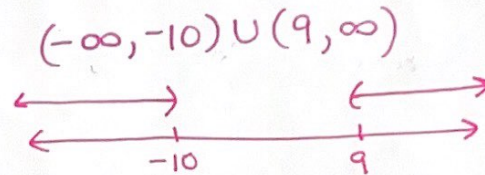
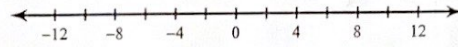
Date _____ Period _____

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

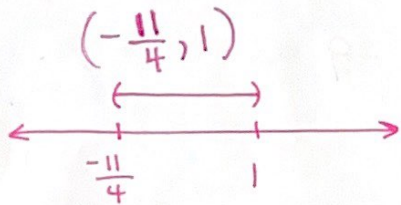
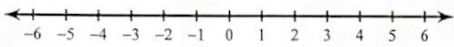
1) $|5x + 10| < 30$



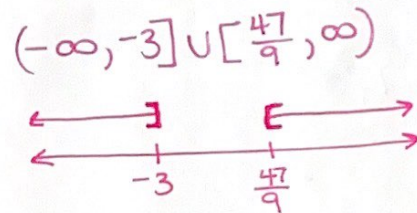
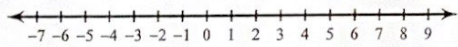
2) $|-4a - 2| > 38$



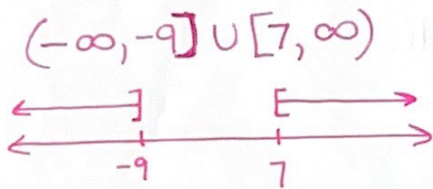
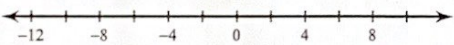
3) $|-7 - 8m| < 15$



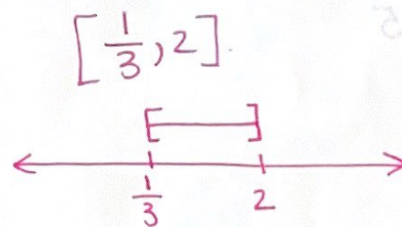
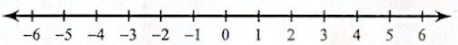
4) $|9b - 10| \geq 37$



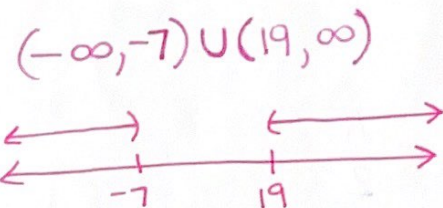
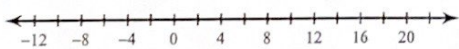
5) $|9b + 9| \geq 72$



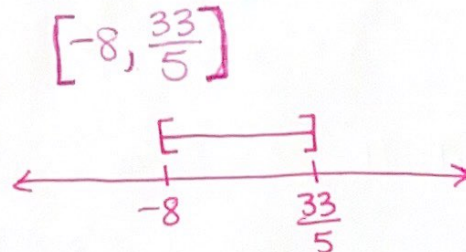
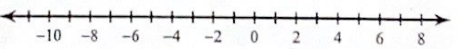
6) $|-6p + 7| \leq 5$



7) $|6 - n| > 13$

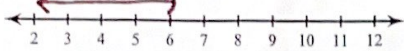


8) $|10x + 7| \leq 73$



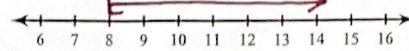
Solve each inequality and graph its solution. Write answers in set-builder notation.

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



$$\{x \mid x < 6\}$$

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



$$\{x \mid x \geq 8\}$$

Solve each equation. Remember to check for extraneous solutions.

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

$$v = 7, 3$$

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

$$n = -2$$

Solve each equation.

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

$$x = 25$$

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

$$x = 16$$

Solve each equation. Remember to check for extraneous solutions.

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

$$n = 11$$

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

$$k = \frac{11}{2}$$