Kuta Software - Infinite Algebra 1

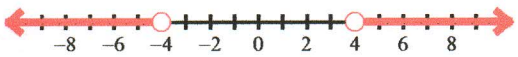
Name_____

Absolute Value Inequalities

Date_____ Period____

Solve each inequality and graph its solution.

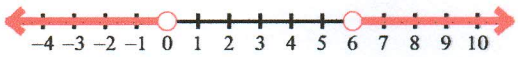
1) $|-5p| > 20$



$p < -4$ or $p > 4$

$(-\infty, -4) \cup (4, \infty)$

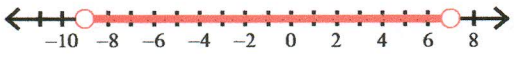
2) $|x - 3| > 3$



$x < 0$ or $x > 6$

$(-\infty, 0) \cup (6, \infty)$

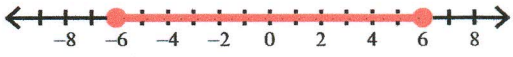
3) $|1 + x| < 8$



$-9 < x < 7$

$(-9, 7)$

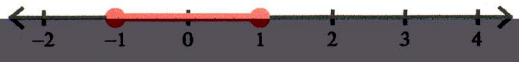
4) $|7x| \leq 42$



$-6 \leq x \leq 6$

$[-6, 6]$

5) $|-7r| \leq 7$



$-1 \leq r \leq 1$

$[-1, 1]$

6) $|k + 3| < 4$

$-7 < k < 1$

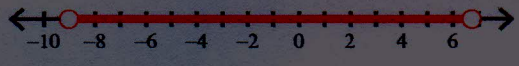
$(-7, 1)$

7) $|-8x - 10| < 58$

$-8.5 < x < 6$

$(-8.5, 6)$

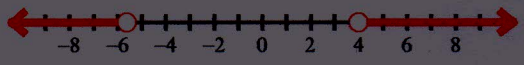
8) $|8b + 9| < 63$



$-9 < b < 6.75$

$(-9, 6.75)$

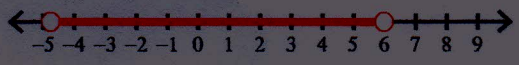
9) $|4 + 5b| > 24$



$x < -5.6$ or $x > 4$

$(-\infty, -5.6) \cup (4, \infty)$

10) $|5 - 8x| < 43$



$-4.75 < x < 6$

$(-4.75, 6)$