

Name : _____

Absolute Value Equations and Inequalities

Solve each equation. Show your work.

1 $|-2p + 5| = 19$

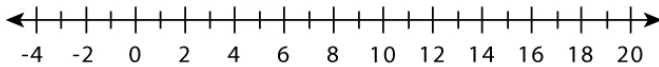
2 $|-2x - 2| = 2$

3 $9|-2n - 3| = 9$

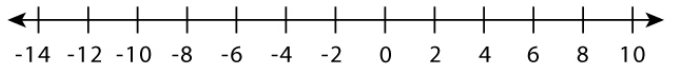
4 $|-4 + 8g| = 68$

Solve each inequality. Graph its solution.

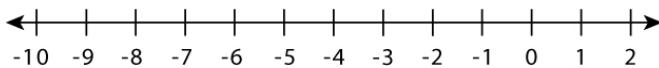
5 $|4 - a| < 6$



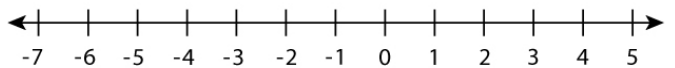
6 $|2f + 1| < 6$



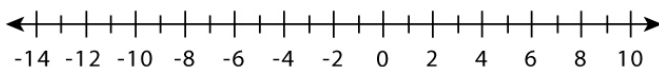
7 $9|9 + 3x| \leq 81$



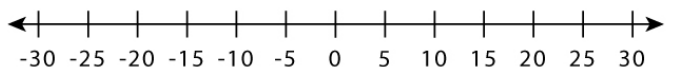
8 $-5|4x + 4| \geq -60$



9 $-1 + |3 - 2g| < 14$



10 $-2|-2q - 8| \geq -56$



Name : _____

Absolute Value Equations and Inequalities

Answers

1 $|-2p + 5| = 19$

$p = -7$ or $p = 12$

2 $|-2x - 2| = 2$

$x = -2$ or $x = 0$

3 $9|-2n - 3| = 9$

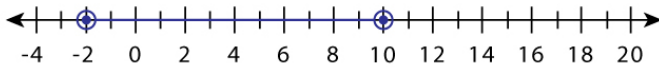
$n = -2$ or $n = -1$

4 $|-4 + 8g| = 68$

$g = 9$ or $g = -8$

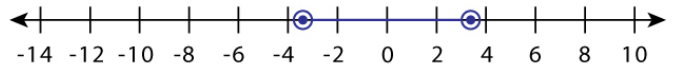
5 $|4 - a| < 6$

$a > -2$ and $a < 10$



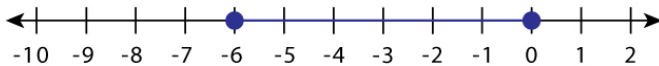
6 $|2f + 1| < 6$

$f < \frac{5}{2}$ and $f > -\frac{7}{2}$



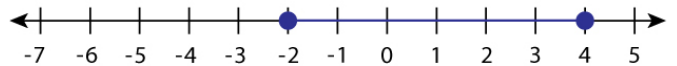
7 $9|9 + 3x| \leq 81$

$x \leq 0$ and $x \geq -6$



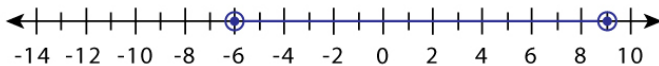
8 $-5|4x + 4| \geq -60$

$x \leq 2$ and $x \geq -4$



9 $-1 + |3 - 2g| < 14$

$g > -6$ and $g < 9$



10 $-2|-2q - 8| \geq -56$

$q \geq -18$ and $q \leq 10$

