

Solving Absolute Value Equations and Inequalities

Solve the inequality, then graph on a number line.

1) $|6x - 3| = 15$

$x = -2, 3$

2) $|3 - 5x| = -8$

3) $|4x - 9| \leq 21$

$-3 \leq x \leq 7.5$

4) $|3x - 2| > 18$

$x < -\frac{16}{3}$ or $x > \frac{20}{3}$

5) $\left|20 + \frac{1}{2}x\right| > 6$

$x < -52$ or $x > -28$

6) $|4x + 10| < 20$

$-\frac{15}{2} < x < \frac{5}{2}$