

Absolute Value Inequalities Quiz

- Solve: $|x| \leq 5$
 - $-5 \leq x \leq 5$
 - $x \leq -5$ or $x \geq 5$
 - All real numbers are solutions
 - There are no solutions
- Solve for x : $|x+2| < 3$
 - $-5 < x < 1$
 - $x < -5$ or $x > 1$
 - All real numbers are solutions
 - There are no solutions
- Find the solution for $|x-7| > -2$
 - $-5 < x < 1$
 - $x < -5$ or $x > 1$
 - All real numbers are solutions
 - There are no solutions
- Determine the solution for: $|x+8| \geq 4$
 - $-12 \leq x \leq -4$
 - $x \leq -12$ or $x \geq -4$
 - All real numbers are solutions
 - There are no solutions
- Find the solution for $|2x-1| \leq 7$
 - $-14 \leq x \leq -6$
 - $-3 \leq x \leq 4$
 - $-1 \leq x \leq 5$
 - None of the above
- What are the solutions for $\left|\frac{x}{2}+3\right| > 6$

- a) $x < -18$ or $x > -6$
- b) $x < -6$ or $x > 18$
- c) $x < -3$ or $x > \frac{1}{2}$
- d) None of the above

7. Solve: $\left|2x + \frac{1}{2}\right| \leq 1$

- a) $-\frac{3}{4} \leq x \leq \frac{1}{4}$
- b) $x < -\frac{3}{4}$ or $x > \frac{1}{4}$
- c) All real numbers are solutions
- d) There are no solutions

8. Determine the solutions for $|7x - 2| > 3$

- a) $x < -\frac{1}{7}$ or $x > \frac{5}{7}$
- b) $-\frac{1}{7} < x < \frac{5}{7}$
- c) All real numbers are solutions
- d) There are no solutions

9. Solve: $\left|\frac{3x}{2} + 1\right| \leq -4$

- a) $x \leq -2$ or $x > \frac{10}{3}$
- b) $-\frac{10}{3} \leq x \leq 2$
- c) All real numbers are solutions
- d) There are no solutions

10. Solve: $|4x + 1| > 9$

- a) $x > 2$ or $x < -\frac{5}{2}$
- b) $-\frac{5}{2} < x < 2$
- c) All real numbers are solutions
- d) There are no solutions

