

Absolute Value Equations and  
Inequalities

1. Solve each absolute value equation

$$|x - 7| = 4$$

2. Solve each absolute value equation

$$|5y + 2| - 6 = -2$$

3. Solve each absolute value equation

$$\left| \frac{3x - 1}{4} \right| = 5$$

4. Solve each absolute value equation

$$|7x - 1| = |3x + 3|$$

5. Solve each absolute value equation

$$\begin{array}{c} o \\ o \\ o \\ |5x + 1| = -2 \end{array}$$

6. Solve each absolute value equation

$$-4|x+3| = -16$$

7. Solve each absolute value equation

$$\begin{aligned} & o \\ & o \\ & o \\ & |x+7| = 0 \end{aligned}$$

8. Solve each absolute value inequality

$$|9x-2| \leq 10$$

9. Solve each absolute value inequality

$$4|x-7| - 3 < 9$$

10. Solve each absolute value inequality

$$|x+7| \geq 3$$

11. Solve each absolute value inequality

$$|-4x+3| - 10 \geq 0$$

12. Solve each absolute value inequality  
(Odd Ball Cases)

$$|x + 5| < -2$$

13. Solve each absolute value inequality  
(Odd Ball Cases)

$$-3|x + 5| < -9$$

14. Solve each absolute value inequality  
(Odd Ball Cases)

$$|x + 5| \leq 0$$

15. Solve each absolute value inequality  
(Odd Ball Cases)

$$|x + 5| > -2$$

16. Solve each absolute value inequality  
(Odd Ball Cases)

$$3 < |x + 5|$$

17. Solve each absolute value equation  
(Odd Ball Cases)

$o$

$o$

$o$

$$x > 2 \quad \text{or} \quad x > 5$$

18. Solve each absolute value equation  
(Odd Ball Cases)

$o$

$o$

$o$

$$x > 2 \text{ or } x < 6$$

19. Solve each absolute value equation  
(Odd Ball Cases)

$o$

$o$

$o$

$$4 > x > 2$$

20. Solve each absolute value equation  
(Odd Ball Cases)

$o$

$o$

$o$

$$3 > x > 5$$