

1-4 Practice

Absolute Value Equations

Solve each equation. Check your answers.

1. $|-3x| = 18$

2. $|5y| = 35$

3. $|t + 5| = 8$

4. $3|z + 7| = 12$

5. $|2x - 1| = 5$

6. $|4 - 2y| + 5 = 9$

Solve each equation. Check for extraneous solutions.

7. $|x + 5| = 3x - 7$

8. $|2t - 3| = 3t - 2$

9. $|4w + 3| - 2 = 5$

10. $2|z + 1| - 3 = z - 2$

Solve each inequality. Graph the solution.

11. $5|y + 3| = 15$

12. $|2t - 3| = 5$

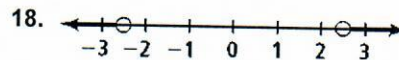
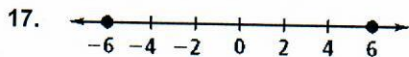
13. $|4b| - 3 = 9$

14. $\frac{1}{2}|2w - 1| - 3 = 1$

15. $2|4x + 1| - 5 = 1$

16. $|3z - 2| + 5 = 9$

Write an absolute value equation or inequality to describe each graph.



Solve each equation.

19. $3|2x + 5| = 9x - 6$

20. $|5p + 3| - 4 = 2p$

21. $2|4w - 5| = 12w - 18$

22. $|4 - 3m| = m + 10$

23. $\frac{3}{4}|8t - 12| = 6(t - 1)$

24. $|7y - 3| + 1 = 0$