

2-2

Practice

Absolute Value Equations and Inequalities

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. $|2t-3|=5$

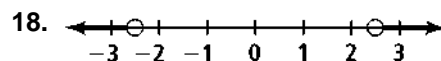
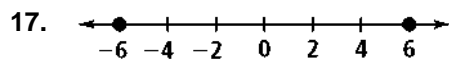
13. $|4b|-3=9$

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