

NAME _____

DATE _____

Module 5 Solving Linear Inequalities of One Variable
Lesson 3 Solving Two-Step Linear Inequalities

independent practice

Solve the following inequalities. Then graph each solution on a number line.

1. $3M + 2 \geq 8$ _____



2. $5M + 4 \leq 19$ _____



3. $7x + 6 < 20$ _____



4. $4x + 7 > 23$ _____



5. $3T + 3 > 12$ _____



6. $2T + 3 \leq 7$ _____



7. $3y + 4 \leq 10$ _____



8. $4y + 8 > 20$ _____



9. $-9c + 3 \geq 30$ _____



10. $-11A + 2 < 24$ _____



11. $\frac{X}{4} - 2 \leq 1$ _____



12. $\frac{N}{6} - 3 > -2$ _____



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13. $-3z - 6 \geq -9$ _____



14. $-5V - 7 \leq 8$ _____



15. $\frac{x}{3} - 1 \leq 2$ _____



16. $\frac{N}{2} - 5 > 1$ _____



17. $-3z + 6 \geq 12$ _____



18. $-5V + 4 \leq 29$ _____



19. $-3z + 7 \geq 1$ _____



20. $-5V + 9 \leq 4$ _____



Journal

1. Explain why you undo addition and subtraction before multiplication and division when solving an inequality algebraically.
2. Describe how you would solve and graph the solution to the inequality $2x - 4 \geq 4$.
3. Fred says that the solution to the inequality $-2x + 3 < 7$ is $x < -2$. Sally says that the solution is $x > -2$. Who is correct and why?
4. Explain why you would use algebra instead of inspection for solving two-step inequalities.
5. Explain how to solve two-step inequalities.

Cumulative Review

Simplify each expression.

1. $\frac{7}{9} + \frac{2}{3}$ _____

2. $\frac{3}{4} - \frac{2}{3}$ _____

3. $\frac{4}{5} - \frac{1}{3}$ _____

4. $(-\frac{3}{5})(\frac{1}{5})$ _____



5. $\frac{2}{3} - \frac{2}{5}$ _____

6. $\frac{1}{3} - \frac{7}{9}$ _____

7. $(-\frac{1}{2})(\frac{3}{7})$ _____

8. $(\frac{2}{3})(-\frac{1}{8})$ _____

9. $(\frac{5}{12})(\frac{4}{5})$ _____

10. $\frac{1}{2} \div \frac{1}{8}$ _____



