

**6-2 Skills Practice*****Solving Inequalities by Multiplication and Division*****Match each inequality with its corresponding statement.**

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|--------------------------|--|
| 1. $3n < 9$              | a. Three times a number is at most nine.                   |
| 2. $\frac{1}{3}n \geq 9$ | b. One third of a number is no more than nine.             |
| 3. $3n \leq 9$           | c. Negative three times a number is more than nine.        |
| 4. $-3n > 9$             | d. Three times a number is less than nine.                 |
| 5. $\frac{1}{3}n \leq 9$ | e. Negative three times a number is at least nine.         |
| 6. $-3n \geq 9$          | f. One third of a number is greater than or equal to nine. |

**Solve each inequality. Then check your solution.**

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|----------------------------|-----------------------|----------------------------|----------------------------|
| 7. $14g > 56$              | 8. $11w \leq 77$      | 9. $20b \geq -120$         | 10. $-8r < 16$             |
| 11. $-15p \leq -90$        | 12. $\frac{s}{4} < 9$ | 13. $\frac{a}{9} \geq -15$ | 14. $-\frac{p}{7} > -9$    |
| 15. $-\frac{t}{12} \geq 6$ | 16. $5z < -90$        | 17. $-13m > -26$           | 18. $\frac{k}{5} \leq -17$ |
| 19. $-y < 36$              | 20. $-16c \geq -224$  | 21. $-\frac{h}{10} \leq 2$ | 22. $12 > \frac{d}{12}$    |

**Define a variable, write an inequality, and solve each problem. Then check your solution.**

23. Four times a number is greater than  $-48$ .
24. One eighth of a number is less than or equal to  $3$ .
25. Negative twelve times a number is no more than  $84$ .
26. Negative one sixth of a number is less than  $-9$ .
27. Eight times a number is at least  $16$ .