Name _____

Solving Equations with Whole Numbers

R 1-15

You can use inverse operations and the properties of equality to get the variable alone to solve an equation.

Solve the equation $3d = 51$.

$3d = 51$

$3d \div \mathbf{3} = 51 \div \mathbf{3}$ To *undo* the multiplication, divide each side of the equation by 3.

$d = 17$

To check your answer, substitute 17 for d in the equation $3d = 51$. If both sides of the equation can be simplified to the same number, the value of the variable is correct.

Check: $3d = 51$

$3(17) = 51$

$51 = 51$

It checks.

Explain how to get the variable alone in each equation.

1. $k + 19 = 34$

_____

_____

2. $37 = f - 24$

_____

_____

3. $17z = 136$

_____

_____

4. $l \div 29 = 10$

_____

_____

Solve each equation and check your answer.

5. $m \times 7 = 21$ _____

6. $15 + n = 35$ _____

7. $8g = 64$ _____

8. $\frac{99}{v} = 9$ _____

9. $t - 54 = 1$ _____

10. $44 = p + 13$ _____

11. Number Sense How can you check if 24 is the correct value for s in $3s = 78$?

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Name _____

Solving Equations with Whole Numbers

P 1-15

Explain how to get the variable alone in each equation.

1. $8x = 96$ _____

2. $n - 16 = 2$ _____

3. $\frac{t}{20} = 300$ _____

4. $h + 32 = 81$ _____

5. **Number Sense** What is the solution for $72n = 144$? _____

Solve each equation and check your answer.

6. $k - 52 = 105$ _____

7. $\frac{x}{12} = 5$ _____

8. $m + 18 = 26$ _____

9. $56 = 56s$ _____

10. $g + 43 = 88$ _____

11. $\frac{v}{4} = 15$ _____

12. $7r = 560$ _____

13. $y - 27 = 94$ _____

14. $34h = 0$ _____

15. The Memorial Day Parade featured marching bands from all over the state. There are 5 French horns in each of the bands in the parade and a total of 75 French horns altogether. Solve the equation $5x = 75$ to determine the number of marching bands in the parade.

_____

Test Prep

16. Which shows the solution for $f - 320 = 647$?

A. 967 **B.** 337 **C.** 327 **D.** 320

17. **Writing in Math** Explain how to get the variable alone in $\frac{m}{16} = 4$.

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