Algebra Practice Problems

Name:_____

Date:_____

Worksheet generated at www.math.com

1.) x + 8 = 14

2.) x + 6 = 18

3.) x + 1 = 9

4.) x + 6 = 16

5.) x / 7 = 2

6.) x + 3 = 6

7.) x / 2 = 7

8.) x + 3 = 7

9.) 5 + x = 16

10.) x + 3 = 7

11.) x / 6 = 7

12.) 7 + x = 18

13.) x + 7 = 15

14.) x + 3 = 12

15.) 4 = x + 4

16.) x + 6 = 11

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 $3d = 51$.

$3d = 51$

$3d \div 3 = 51 \div 3$ 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. $17z - 100$

4. $i - 29 = 10$

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 $3s = 78$?

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 $\frac{m}{16} = 4$.

_____

_____

Solve It with Addition and Subtraction II

Name _____

Solve each of the following equations. Show all your work.

Add the same value to each side.	Or subtract the same value from each side.
$x - 6 = 3$	$x + 2 = 7$
$x - 6 + 6 = 3 + 6$	$x + 2 - 2 = 7 - 2$
$x = 9$	$x = 5$

1. $x + 5 = 9, x =$ _____
2. $x + 3 = 8, x =$ _____
3. $x + 8 = 12, x =$ _____
4. $x + 15 = 15, x =$ _____
5. $x + 36 = 41, x =$ _____
6. $7 + x = 15, x =$ _____
7. $23 + x = 35, x =$ _____
8. $46 + x = 98, x =$ _____
9. $25 + x = 34, x =$ _____
10. $35 + x = 42, x =$ _____
11. $x - 9 = 15, x =$ _____
12. $x - 15 = 15, x =$ _____
13. $x - 36 = 39, x =$ _____
14. $x - 56 = 0, x =$ _____
15. $x - 28 = 49, x =$ _____
16. $x + 16 = 45, x =$ _____
17. $x - 37 = 29, x =$ _____
18. $69 + x = 72, x =$ _____
19. $26 + x = 35, x =$ _____
20. $x - 64 = 16, x =$ _____

Solve one-step equations using addition or subtraction