

Name: _____

Date: _____

Solving Algebra Equations Part 2

Solve each equation.

One Step Addition Example

The Opposite of Addition is Subtraction

$$\begin{array}{rcl} y + 14 & = 20 \\ -14 & & -14 \\ y & = 6 & \checkmark \end{array}$$

The value which makes the equation true is 6.

1. $a + 4 = 10$

$a = \underline{\hspace{2cm}}$

2. $b + 6 = 19$

$b = \underline{\hspace{2cm}}$

3. $c + 3 = 24$

$c = \underline{\hspace{2cm}}$

4. $d + 12 = 35$

$d = \underline{\hspace{2cm}}$

One Step Subtraction Example

The Opposite of Subtraction is Addition

$$\begin{array}{rcl} x - 120 & = 80 \\ +120 & & +120 \\ x & = 200 & \checkmark \end{array}$$

The value which makes the equation true is 200.

5. $e - 2 = 8$

$e = \underline{\hspace{2cm}}$

6. $f - 7 = 13$

$f = \underline{\hspace{2cm}}$

7. $g - 14 = 8$

$g = \underline{\hspace{2cm}}$

8. $h - 22 = 15$

$h = \underline{\hspace{2cm}}$

Multiplication Example

The Opposite of Multiplication is Division

$$\begin{array}{rcl} 3n & = 12 \\ \cancel{3} \cancel{n} & = \cancel{12} & 3/3 cancels down \\ n & = 4 & to become 1/1 = 1 \\ & \checkmark & 1n is simply "n" \end{array}$$

The value which makes the equation true is 4.

9. $2i = 16$

$i = \underline{\hspace{2cm}}$

10. $5j = 25$

$j = \underline{\hspace{2cm}}$

11. $6k = 36$

$k = \underline{\hspace{2cm}}$

12. $3m = 21$

$m = \underline{\hspace{2cm}}$

One Step Division Example

The Opposite of Division is Multiplication

$$\begin{array}{rcl} \frac{k}{2} & = 16 & k \text{ is divided by 2,} \\ & & \text{so we need to multiply} \\ & \cancel{k} \cancel{2} & \text{both sides by 2} \\ & = 16 \times 2 & 2/2 cancels down \\ & \cancel{2} & to become 1/1 = 1 \\ k & = 32 & 1k is simply "k" \\ & \checkmark & \end{array}$$

The value which makes the equation true is 32.

13. $\frac{n}{5} = 2$

$n = \underline{\hspace{2cm}}$

14. $\frac{p}{2} = 4$

$p = \underline{\hspace{2cm}}$

15. $\frac{r}{7} = 6$

$r = \underline{\hspace{2cm}}$

16. $\frac{t}{3} = 7$

$t = \underline{\hspace{2cm}}$