Name: _____

Solving One-Step Equations

Addition and Subtraction

Balance both sides of the equation by using inverse operations to get the variable alone and find its value.

examples:

$x + 4 = 12$
$-4 \quad -4$
$x = 8$

$d - 7 = 10$
$+7 \quad +7$
$d = 17$

Be sure to make the same change to **both sides of the equal sign.*

Solve each equation to find the value of the variable.

1. $25 = y + 20$

2. $k + 22 = 37$

3. $14 = x + 11$

4. $g - 21 = 6$

5. $h - 9 = 7$

6. $b - 14 = 6$

7. $18 = c + 5$

8. $2 = e - 9$

9. $f + 8 = 13$

10. $d + 10 = 24$

11. $2 + a = 11$

12. $k + 17 = 30$

Name: _____

Basic Algebra

Determine the value of the variable in each equation.

1. $a + 5 = 9$

$a =$ _____

2. $15 - c = 12$

$c =$ _____

3. $9 + 15 = y$

$y =$ _____

4. $\frac{45}{d} = 5$

$d =$ _____

5. $10z = 100$

$z =$ _____

6. $\frac{t}{7} = 8$

$t =$ _____

7. $6b = 66$

$b =$ _____

8. $20 - g = 6$

$g =$ _____

9. $3 + r = 18$

$r =$ _____

10. $v - 14 = 26$

$v =$ _____

11. $\frac{48}{4} = m$

$m =$ _____

12. $3s = 9$

$s =$ _____

13. $\frac{16}{h} = 1$

$h =$ _____

14. $15 + 12 = q$

$q =$ _____

15. $\frac{121}{j} = 11$

$j =$ _____

★ $4 + f = 13 - 2$

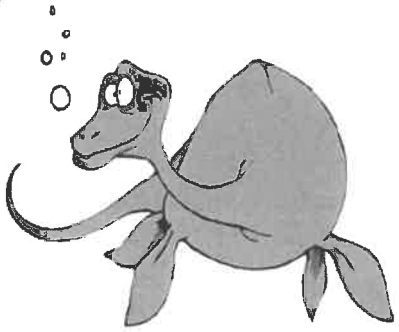
$f =$ _____

★ $5 + 3 = 4d$

$d =$ _____

Name: _____

Basic Algebra



Determine the value of the variable in each equation.

1. $6 + a = 12$

$a =$ _____

2. $7 - b = 2$

$b =$ _____

3. $11 + 14 = c$

$c =$ _____

4. $\frac{24}{d} = 3$

$d =$ _____

5. $10e = 110$

$e =$ _____

6. $\frac{f}{7} = 7$

$f =$ _____

7. $13g = 26$

$g =$ _____

8. $35 - h = 10$

$h =$ _____

9. $6 + i = 23$

$i =$ _____

10. $j - 17 = 7$

$j =$ _____

11. $\frac{42}{7} = k$

$k =$ _____

12. $4m = 32$

$m =$ _____

13. $\frac{72}{n} = 9$

$n =$ _____

14. $33 + 66 = p$

$p =$ _____

15. $\frac{q}{8} = 5$

$q =$ _____

★ $5 + r = 14 - 3$

$r =$ _____

★ $11 + 4 = 3s$

$s =$ _____

Name: _____

Writing One-Step Equations

Write an equation to match each situation.

1. Abbie is going out for pizza with her friends. For $60 total, they can buy *p* pizzas. Each pizza costs $12.

   Equation: _____

2. Mr. Harris is buying notebooks for his students. He buys 24 notebooks for *d* dollars each and spends a total of $48.

   Equation: _____

3. Jada scored 15 points in one basketball game and *p* points in another. Her two-game total is 34 points.

   Equation: _____

4. Max earned $18 mowing lawns this week. If he spends $4 on ice cream, he will have *d* dollars left.

   Equation: _____

5. Ben found 26 seashells on the beach. He gave his sister *s* seashells and now he has 14 left.

   Equation: _____

Writing One-Step Equations

6. Mrs. Johnson is collecting flowers from her garden. She has 8 flowers in a vase and she picks *f* more for a total of 20 flowers.

Equation: _____

7. Mrs. Fritz is buying books for her classroom library. She buys *b* books for $7 each for a total of $63.

Equation: _____

8. Jackson had 32 video games. He gave his friend 8 video games and now has *g* games left.

Equation: _____

9. Brianna is driving to visit her grandmother. She needs to travel 23 miles total. She has already driven 6 miles and needs to go *m* more.

Equation: _____

10. Erik is taking his friends to an amusement park for his birthday. He spends a total of $84 for *t* tickets. Each ticket costs $14.

Equation: _____