

Name ANSWER KEY Period \_\_\_\_\_ Date \_\_\_\_\_

### Solving Two-Step Equations 1

You must show your work to get credit!! Check your answer.

1)  $3y + 6 = 12$

2

2)  $10 + 3v = 25$

5

3)  $2x + 8 = 16$

4

4)  $\frac{k}{2} + 4 = 6$

4

5)  $3h - 5 = 22$

9

6)  $\frac{j}{3} + 5 = 9$

12

7)  $6p - 10 = 26$

6

8)  $\frac{n}{10} - 20 = 0$

200

9)  $\frac{h}{4} + 1 = 9$

32

10)  $9s - 40 = 41$

9

11)  $14 = 2c + 8$

3

12)  $8 = 5d - 12$

4

13)  $6 = \frac{m}{3} - 9$

45

14)  $4w - 6 = 10$

4

15)  $\frac{f}{3} + 2 = 11$

27

Name ANSWER KEY Period \_\_\_\_\_ Date \_\_\_\_\_

### Solving Two-Step Equations 2

You must show your work to get credit!!

1)  $5y + 6 = 31$

**5**

2)  $12 + 3v = 27$

**5**

3)  $5x - 7 = 18$

**5**

4)  $\frac{k}{2} - 4 = 18$

**44**

5)  $7h - 5 = 44$

**7**

6)  $\frac{j}{3} + 6 = 10$

**12**

7)  $4p - 12 = 16$

**7**

8)  $\frac{n}{6} - 16 = 5$

**126**

9)  $\frac{h}{3} + 7 = 4$

**-9**

10)  $2s - 8 = 12$

**10**

11)  $29 = 2c + 3$

**13**

12)  $4 = 5d - 11$

**3**

13)  $13 = \frac{m}{2} - 5$

**36**

14)  $4w - 8 = 32$

**10**

15)  $\frac{f}{4} + 6 = 10$

**16**

Name ANSWER KEY Period \_\_\_\_\_ Date \_\_\_\_\_

**Solving Two-Step Equations 3**

You must show your work to get credit!!

1)  $2y + 5 = 19$

**7**

2)  $26 + 4v = 38$

**3**

3)  $7x - 1 = 41$

**6**

4)  $\frac{k}{2} - 5 = 13$

**36**

5)  $9h - 15 = 75$

**10**

6)  $\frac{j}{3} + 10 = 65$

**165**

7)  $4p - 15 = 1$

**4**

8)  $\frac{n}{6} - 4 = 8$

**72**

9)  $\frac{h}{3} + 9 = 13$

**12**

10)  $5s - 3 = 48$

**10 1/5**

11)  $25 = 2c + 7$

**9**

12)  $4 = 5d - 16$

**4**

13)  $5 = \frac{m}{2} - 5$

**20**

14)  $2w - 10 = 40$

**25**

15)  $\frac{f}{3} + 8 = 16$

**24**

Name : \_\_\_\_\_

Score : \_\_\_\_\_

**Answer Key****Two-Step Equations: Integers**

Sheet 1

Solve each equation.

1)  $5n + 5 = 45$

**$n = 8$**

2)  $\frac{y}{6} - 3 = -11$

**$y = -48$**

3)  $4(g - 1) = 24$

**$g = 7$**

4)  $\frac{v+9}{15} = 0$

**$v = -9$**

5)  $-40 = 12x + 8$

**$x = -4$**

6)  $-2p - 3 = -19$

**$p = 8$**

7)  $13 = \frac{w-14}{2}$

**$w = 40$**

8)  $36 = 1 + 7a$

**$a = 5$**

9)  $-9 = -11 + \frac{b}{8}$

**$b = 16$**

10)  $2q + 10 = 7q$

**$q = 2$**

Name : \_\_\_\_\_

Score : \_\_\_\_\_

## Answer key

### Two-Step Equations - Integers

Sheet 1

- 1) Dalia bought a few swirl marbles and divided it equally among four of her friends and her brother, Jake. While playing, Jake lost 2 marbles and has only 7 marbles at present. Find how many marbles did Dalia buy in all.

$$\frac{x}{5} - 2 = 7 ; 45 \text{ marbles}$$

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- 2) A bus departed from New York at 11 pm with 44 passengers. An hour later, a few passengers got off at New Jersey. The number of passengers who boarded the bus at New Jersey were twice the number of passengers who got off the bus. If the bus has 50 passengers now, how many passengers got off at New Jersey?

$$44 - x + 2x = 50 ; 6 \text{ passengers}$$

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- 3) Clara lends half her collection of formal attires to her sister, Susan. Clara then buys four more attires. If she has 12 attires now, how many attires did Clara had initially?

$$\frac{x}{2} + 4 = 12 ; 16 \text{ attires}$$

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- 4) The Rock Zoo nurses 37 species of big cats. Recently, a few species of big cats were sponsored to other zoos around the country. The zoo now nurses only 25 species. How many species of big cats were sponsored to other zoos?

$$37 - x = 25 ; 12 \text{ species}$$

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- 5) Megan and four of her friends plan to go for a long drive. She buys 12 bottles of frappe and a few bottles of orange juice from a supermarket. The total number of bottles they have are four times that of orange juice bottles. How many bottles of orange juice did Megan buy?

$$12 + x = 4x ; 4 \text{ bottles}$$

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Name : \_\_\_\_\_

Score : \_\_\_\_\_

## Answer key

## Two-Step Equations - MCQ

Sheet 1

- 1) Janice had  $x$  color pencils in her box and shares them equally with her friend, Talia. Her brother gives her 2 more color pencils. Janice now has 3 pencils in her box.

a)  $\frac{x}{2} + 3 = 2$

b)  $2x - 2 = 3$

c)  $\frac{x}{2} - 2 = 3$

d)   $\frac{x}{2} + 2 = 3$

- 2) A meteorologist measured the average rainfall received in Cities A and B. Both cities received 11 inches of rainfall in total. While City A received  $x$  inches of rain, City B experienced three times the amount of rainfall than City A.

a)   $x + 3x = 11$

b)  $x - 3x = 11$

c)  $3x - x = 11$

d)  $11 = -3x - x$

- 3) Timothy spent a total of \$68 at Macys. His purchases included a pair of jeans at \$32 and 2 t-shirts at \$ $x$  each.

a)  $2x - 32 = 68$

b)   $2x + 32 = 68$

c)  $2x + 32 = -68$

d)  $2x + 68 = 32$

- 4) A customer at a Mexican diner placed an order for 3 buritto bowls which was priced at \$ $x$  each. He also ordered a plate of corn tacos at \$12.96 and was billed for a total of \$32.46.

a)   $3x + 12.96 = 32.46$

b)  $2x - 32.46 = 12.96$

c)  $2x + 12.96 = 32.46$

d)  $3x - 12.96 = 32.46$

- 5) Mr. Hewitt estimates the cost towards a fresh paint job for the exteriors of his home. He makes a provision for 12 gallons of paint priced at \$ $x$  per gallon. The cost of paint supplies and miscellaneous expenses are \$2264. The total estimated cost for the paint job is \$2624.

a)  $12x - 2264 = 2624$

b)  $12x + 2624 = 2264$

c)   $12x + 2264 = 2624$

d)  $12x + 2624 = -2264$

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### Solving Two-Step Equations 4

You must show your work to get credit!!

1)  $3y + 4 = 22$

**6**

2)  $12 + 4v = 8$

**-1**

3)  $5x - 2 = 57$

**11 4/5**

4)  $\frac{k}{2} - 6 = 28$

**68**

5)  $2h - 13 = 21$

**17**

6)  $\frac{j}{3} + 21 = 74$

**159**

7)  $4p - 19 = 28$

**11 3/4**

8)  $\frac{n}{5} - 15 = 6$

**105**

9)  $\frac{h}{3} + 10 = 8$

**-6**

10)  $4s - 23 = 9$

**8**

11)  $13 = 2c + 9$

**2**

12)  $34 = 6d - 8$

**7**

13)  $2 = \frac{m}{8} - 1$

**24**

14)  $3w - 14 = 7$

**7**

15)  $\frac{f}{9} + 2 = -1$

**-27**

Name \_\_\_\_\_

Date \_\_\_\_\_

## 6.3.6 Two-step Equation Worksheet

Directions: solve each equation. Use mental math to check the solution.

1.  $7m + 8 = 71$

 $9$ 

11.  $3n - 8 = 4$

 $4$ 

2.  $\frac{y}{7} + 6 = 11$

 $35$ 

12.  $2n - 3 = 9$

 $6$ 

3.  $12x + 2 = 146$

 $12$ 

13.  $\frac{n}{5} - 4 = 11$

 $75$ 

4.  $\frac{m}{9} - 17 = 21$

 $342$ 

14.  $\frac{z}{2} + 1 = 9$

 $16$ 

5.  $2a - 1 = 19$

 $10$ 

15.  $2y + 16 = 10$

 $-3$ 

6.  $\frac{c}{9} - 8 = 17$

 $225$ 

16.  $3n + 2 = 12$

 $\frac{10}{3}$ 

7.  $4f + 11 = 29$

 $4.5$ 

17.  $4n - 8 = 5$

 $\frac{13}{4}$ 

8.  $13n - 9 = 17$

 $2$ 

18.  $\frac{n}{2} + 5 = 15$

 $20$ 

9.  $\frac{e}{5} - 14 = 8$

 $110$ 

19.  $5v - 42 = 73$

 $23$ 

10.  $4w - 26 = 82$

 $27$ 

20.  $3d - 13 = 11$

 $8$