

Name: EOZ

Basic Algebra Review



Evaluate each expression. Let $a = 24$. Let $b = 2$.

$34 - b$ 32

$\frac{a}{3}$ 8

$9b$ 18

$a + b$ 26

$2a$ 48

$\frac{24}{a}$ 1

Rewrite each phrase as an algebraic expression.

subtract 7 from c $c - 7$

30 divided by d $\frac{30}{d}$

the product of 5 and e $5e$

the sum of 8 and f $8 + f$

Determine the value of the variable in each equation.

$14 + g = 26$
 -14
 $g = 12$

$12h = 60$
 $\frac{12h}{12} = \frac{60}{12}$
 $h = 5$

$\frac{28}{i} = 4$

$i = 7$

Determine the value of the unknown variable in each equation.

$11j = k$

$j = 10$, $k = 110$

$\frac{16}{m} = n$

$m = 4$, $n = 4$

$p + 7 = q$

$p = 12$, $q = 19$

$12 + 7 = 19$

Complete the tables.

| $\frac{40}{r} = s$ | | | | | |
|--------------------|----|----|---|---|----|
| r | 2 | 4 | 5 | 8 | 40 |
| s | 20 | 10 | 8 | 5 | 1 |

| $13 - x = y$ | | | | | |
|--------------|----|----|---|---|----|
| x | 13 | 2 | 5 | 9 | 12 |
| y | 0 | 11 | 8 | 4 | 1 |

Name: L02

Equations with 2 Variables

Determine the value of the unknown variable in each equation.

$$10 + a = b$$

$$a = 7, b = \underline{17}$$

$$g - 2 = h$$

$$g = 10, h = \underline{8}$$



$$12n = m$$

$$n = \underline{3}, m = 36$$

$$\frac{16}{v} = w$$

$$v = 2, w = \underline{8}$$

$$e + 9 = f$$

$$e = \underline{8}, f = 17$$

| $x + 14 = y$ | | | | | |
|--------------|----|----|----|----|----|
| x | 4 | 6 | 9 | 11 | 16 |
| y | 18 | 20 | 23 | 25 | 30 |

| $5y = z$ | | | | | |
|----------|----|----|----|----|----|
| y | 2 | 4 | 6 | 8 | 12 |
| z | 10 | 20 | 30 | 45 | 60 |

| $a - 6 = b$ | | | | | |
|-------------|----|----|----|----|----|
| a | 12 | 15 | 24 | 28 | 50 |
| b | 6 | 9 | 18 | 22 | 50 |

| $\frac{r}{2} = s$ | | | | | |
|-------------------|---|---|---|----|----|
| r | 2 | 4 | 8 | 14 | 22 |
| s | 1 | 2 | 4 | 7 | 11 |

| $\frac{50}{n} = m$ | | | | | |
|--------------------|----|----|----|----|----|
| n | 2 | 5 | 10 | 25 | 30 |
| m | 25 | 10 | 5 | 2 | 1 |

| $9 - x = y$ | | | | | |
|-------------|---|---|---|---|---|
| x | 0 | 3 | 5 | 8 | 9 |
| y | 9 | 6 | 4 | 1 | 0 |

Name: L O Z

Basic Algebra with 2 Variables



1.

$$a + 5 = b$$

If a equals 2, b will equal 7.

If a equals 4, b will equal 9.

If a equals 7, b will equal 12.

2.

$$c - 6 = d$$

If c equals 10, d will equal 4.

If c equals 14, d will equal 8.

If c equals 21, d will equal 15.

3.

$$7e = f$$

If e equals 3, f will equal 21.

If e equals 6, f will equal 42.

If e equals 12, f will equal 84.

4.

$$\frac{12}{g} = h$$

If g equals 3, h will equal 4.

If g equals 4, h will equal 3.

If g equals 2, h will equal 6.

5.

$$j + 5 = k$$

| j | k |
|---|----|
| 3 | 8 |
| 0 | 5 |
| 9 | 14 |
| 8 | 13 |

6.

$$6m = n$$

| m | n |
|---|----|
| 3 | 18 |
| 5 | 30 |
| 0 | 0 |
| 9 | 54 |

7.

$$\frac{p}{3} = q$$

| p | q |
|----|----|
| 9 | 3 |
| 33 | 11 |
| 36 | 12 |
| 21 | 7 |

8.

$$13 - r = s$$

| r | s |
|----|---|
| 7 | 6 |
| 8 | 5 |
| 9 | 4 |
| 12 | 1 |

-1 $\frac{13}{14}$

Estimate. (Lesson 2.5)

65. $4,593 \div 53 =$ 90

66. $6,298 \div 164 =$ 30

67. $7,623 \div 4,451 =$ 2

68. $4,239 \div 73 =$ 60

Divide. (Lesson 2.6)

69. $96 \div 16 =$ 6

$$\begin{array}{r} 3 \\ 16 \\ \times 6 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 6 \\ 16 \overline{) 96} \\ \underline{96} \\ 0 \end{array}$$

70. $57 \div 23 =$ 2 R1

$$\begin{array}{r} 2 \overline{) 57} \\ \underline{46} \\ 11 \end{array}$$

71. $459 \div 27 =$ 17

$$\begin{array}{r} 17 \\ 27 \overline{) 459} \\ \underline{27} \\ 189 \\ \underline{189} \\ 0 \end{array}$$

72. $503 \div 15 =$ 33 R8

$$\begin{array}{r} 33 \overline{) 503} \\ \underline{45} \\ 53 \\ \underline{45} \\ 8 \end{array}$$

Name: LOZDate: 1-5-2021**Simplify** (Lesson 2.7)
 \times or \div
 $+$ or $-$

73. $60 + 12 - 36 = \underline{36}$

$$\downarrow$$

$$72 - 36 = 36$$

74. $10 \times 9 \div 3 = \underline{30}$

$$\downarrow$$

$$90 \div 3 = 30$$

75. $29 + 42 \div 6 = \underline{36}$

$$\downarrow$$

$$42 \div 6 = 7$$

$$29 + 7 = 36$$

$$\begin{array}{r} 6 \overline{) 42} \\ 36 \\ \hline 6 \end{array}$$

76. $(90 - 85) \times 7 = \underline{35}$

$$\downarrow$$

$$5 \times 7 = 35$$

77. $50 \times 8 + 12 \div 4 = \underline{403}$ 78. $69 \div 3 - 3 + 10 = \underline{10}$

$$\downarrow$$

$$50$$

$$\times 8$$

$$\begin{array}{r} 400 \\ + 3 \\ \hline 403 \end{array}$$

$$\downarrow \quad \downarrow$$

$$23 - 13$$

$$= 10$$