

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

Date: \_\_\_\_\_

Combine like terms for each expression.

1)  $13x + 18 - 3x$

2)  $20m + 12n - 5m + 13n + 65$

3)  $18c + 4 + 2c$

4)  $17b + 2c + b - c$

5)  $19a + 16b - 5a + 4b + 4$

6)  $11b + 14c - 5b + 3c + 35$

7)  $a + 8 - 4$

8)  $12a + 19b + 12a - 9b$

9)  $13q + 6 - 6q$

10)  $19a + 12b + a - 2b$

11)  $q + 13 - 6$

12)  $18p + 8q + 2p - 7q$

13)  $4a + 13b - 2a + 2b + 25$

14)  $10m + 12n - 5m + 3n + 5$

15)  $19a + 2b + 11a - b$

16)  $y + 8 - 6$

17)  $a + 70 - 35$

18)  $10y + 3 - 2y$

19)  $8m + 9 + 3m$

20)  $19x + 12y - 5x + 13y + 75$

[http://www.softschools.com/math/algebra/expressions/combining\\_like\\_terms\\_worksheets/](http://www.softschools.com/math/algebra/expressions/combining_like_terms_worksheets/)

Name \_\_\_\_\_

## Variables and Expressions

R 1-13

Word Phrase	Operation	Algebraic Expression
<ul style="list-style-type: none"> <li>• six <b>more than</b> a number</li> <li>• the <b>sum of</b> 5 and a number <math>t</math></li> </ul>	Addition	$n + 6$ $5 + t$
<ul style="list-style-type: none"> <li>• three <b>less than</b> a number <math>n</math></li> <li>• the <b>difference of</b> 7 and a number <math>t</math></li> </ul>	Subtraction	$n - 3$ $7 - t$
<ul style="list-style-type: none"> <li>• the <b>product of</b> 9 and a number <math>n</math></li> <li>• <b>12 times</b> a number <math>b</math></li> </ul>	Multiplication	$9 \times n$ or $9n$ or $9 \cdot n$ $b \times 12$
<ul style="list-style-type: none"> <li>• the <b>quotient of</b> a number <math>g</math> divided by 3</li> </ul>	Division	$g \div 3$ or $\frac{g}{3}$

To evaluate  $23n$  for  $n = 5$ , substitute 5 for  $n$ , and multiply.

$23 \times 5 = 115$

Write each word phrase as an algebraic expression.

- 25 more than  $p$  \_\_\_\_\_
- the product of  $s$  and 7 \_\_\_\_\_
- 14 decreased by  $e$  \_\_\_\_\_
- $n$  divided by 18 \_\_\_\_\_

Evaluate each expression for  $b = 6$ .

- $b \times 5$  \_\_\_\_\_
- $19 + b$  \_\_\_\_\_
- $42 \div b$  \_\_\_\_\_

For 8–11, evaluate each expression for  $n = 3, 5,$  and  $7$ .

- $n - 1$  \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- $n + 13$  \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- $9n$  \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- $\frac{105}{n}$  \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

12. **Number Sense** Write  $11n$  as a word phrase in two different ways.

\_\_\_\_\_

\_\_\_\_\_

Use with Lesson 1-13.

Name \_\_\_\_\_

## Variables and Expressions

P 1-13

Write each word phrase as an algebraic expression.

1. twice  $n$                       2. 3 less than  $p$                       3.  $c$  increased by 6

4.  $m$  times 31                      5.  $5d$  minus 4                      6. 50 divided by  $t$

7. **Number Sense** What is a word phrase for  $42 + 36 + n$ ?

Evaluate each expression for  $y = 2, 6,$  and  $8$ .

8.  $y + 12$  \_\_\_\_\_                      9.  $\frac{96}{y}$  \_\_\_\_\_

10.  $5y$  \_\_\_\_\_                      11.  $\frac{y}{2}$  \_\_\_\_\_

12.  $11y$  \_\_\_\_\_                      13.  $561 - y$  \_\_\_\_\_

14. A state produces  $b$  peaches per month. Write an expression for the average number of peaches produced each year. \_\_\_\_\_

15. The Oregon Dunes national resource area in Oregon covers 27,212 acres. Another national resource area in New Mexico covers  $v$  acres. Write an expression that shows the approximate number of acres covered by both areas. \_\_\_\_\_

### Test Prep

16. Evaluate the expression  $10f$  if  $f = 31$ .

- A. 3.1                      B. 31                      C. 310                      D. 3,100

17. **Writing in Math** Write two different word phrases for  $5h$ .

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Mystery Number

Name \_\_\_\_\_

Use the following clues to determine the mystery number. For each one, write an equation and then solve the equation.

1. When 3 is added to my number, the sum is 38. What is my number?

\_\_\_\_\_

2. When 15 is subtracted from my number, the difference is 45. What is my number?

\_\_\_\_\_

3. When my number is added to 18, the sum is 30. What is my number?

\_\_\_\_\_

4. When 36 is subtracted from my number, the difference is 85. What is my number?

\_\_\_\_\_

5. When 62 is added to my number, the sum is 130. What is my number?

\_\_\_\_\_

6. When 49 is subtracted from my number, the difference is 15. What is my number?

\_\_\_\_\_

7. When 22 is subtracted from my number, the difference is 54. What is my number?

\_\_\_\_\_

8. When 55 is added to my number, the sum is 108. What is my number?

\_\_\_\_\_

9. When my number is subtracted from 25, the difference is 7. What is my number?

\_\_\_\_\_

10. When my number is added to 653, the sum is 1,637. What is my number?

\_\_\_\_\_

Solve one-step equations using addition or subtraction