

Verbal Expressions

You have five minutes to review your notes for this week. Then there will be a quiz.

Your homework over distributive property will be checked on Monday.

When you are finished with the quiz, go to the website and begin copying the notes for today.

Homework over the weekend is on schoolnet
Passcode: FBFRIM8W3

Vocabulary

verbal expression

an expression written as a word phrase

Examples:

two plus four

a number increased by two

Verbal expressions can be translated to numerical or algebraic expressions by identifying numerical values, variables, and key terms that signal an operation.

Vocabulary Review

Explain the difference between a **numerical expression** and an **algebraic expression**.



Numerical expression



Algebraic expression

Vocabulary

Identify each as a *numerical expression* or an *algebraic expression*. Explain your answer.

Drag the expression to the correct column

numerical expression

algebraic expression

$$6 \cdot 24 \div (8 - 5)$$

$$17 + 5^3$$

$$3 + 6$$

$$9 - d$$

$$5(x - 4)$$

$$x - 12$$

ADDITION

plus

sum

increased by

more than

SUBTRACTION

decreased by

less than

minus

difference

MULTIPLICATION

times

of

product

multiplied by

DIVISION

quotient

divided by

Organize the words.

Tips to remember:

- Letters in algebra are called **variables** because their values can **vary**.
- When multiplying a number and a variable, the number is written first. For example: x times 5 is $5x$ not $x5$.
- Don't use subtraction in the wrong order!

For example:

"the difference of 5 and t " and "5 decreased by t "
are translated as $5 - t$

while "5 less than t " and "5 subtracted from t "
are translated as $t - 5$.

Word Phrases	Algebraic Expression
<p>9 more than a number the sum of 9 and a number a number plus 9 a number increased by 9 the total of x and 9</p>	$x + 9$
<p>4 subtracted from a number a number minus 4 4 less than a number a number decreased by 4 the difference of h and 4</p>	$h - 4$
<p>6 multiplied by g 6 times a number the product of g and 6</p>	$6g$
<p>a number divided by 5 the quotient of t and 5 divide a number by 5</p>	$\frac{t}{5}$

Translate the verbal phrase into a variable expression.

1) The sum of a number y and 20. $y + 20$

2) Six more than twice a number y . $2y + 6$

3) The difference of 8 and a number y . $8 - y$

4) 9 divided by a number y . $9 \div y, 9/y, \frac{9}{y}$

5) The product of a number y and 20. $20y, 20(y), 20 \bullet y$

6) Two less than a number y . $y - 2$

(Click on the yellow box to reveal the answer.)

Determine which verbal expression matches the algebraic expression.

7) Two more than 4 times a number y

$$4y + 2$$

8) Five times the sum of a number y and 3 times another number w.

$$5(y+3w)$$

9) Eight times the difference of 12 and 2.

$$8(12 - 2)$$

Match the expression to the phrase by dragging the algebraic expression to the verbal phrase.

$$14 \div (7 - y) \quad 7(14 + y)$$

$$2(y + 7) \quad y + 14 \quad 7 + 14y$$

10) A number y multiplied by 14. $14y$

11) The quotient of 14 divided by a number y . $14 \div y$

12) 14 less than a number y . $y - 14$

13) 7 increased by a number y . $7 + y$

14) A number y subtracted from 14. $14 - y$

Match the expression to the phrase by dragging the algebraic expression to the verbal phrase.

$14 - y$

$14y$

$7 + y$

$7 + 14y$

$y - 14$

$14 \div y$

15) 14 more than a number y . $y + 14$

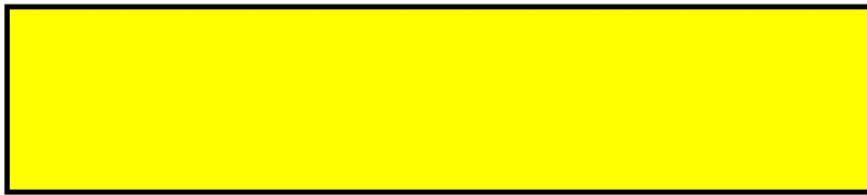
16) 7 more than the product of 14 and a number y .

17) Twice the sum of a number y and 7. $2(y + 7)$
Handwritten: $14y + 7$

18) Product of 7 and the sum of 14 and a number y .
 $7(14 + y)$

19) 14 divided by the difference when a number y is subtracted from 7. $14 \div (7 - y)$

Match the expression to the phrase by dragging the algebraic expression to the verbal phrase.



- 20) The number of hours in y days. $24y$
- 21) The number of yards in y feet. $y \div 3$
- 22) The number of minutes in y seconds. $y \div 60$
- 23) The number of seconds in y minutes. $60y$
- 24) The number of days in y hours. $y \div 24$
- 25) The number of feet in y yards. $3y$

