

Translating Verbal Phrases to Algebraic Expressions

To translate statements into expressions and equations:

- Identify _____ that indicate the operation.
- Write the numbers/variables in the correct order.

KEY WORDS

The **SUM** of _____ and _____ : _____

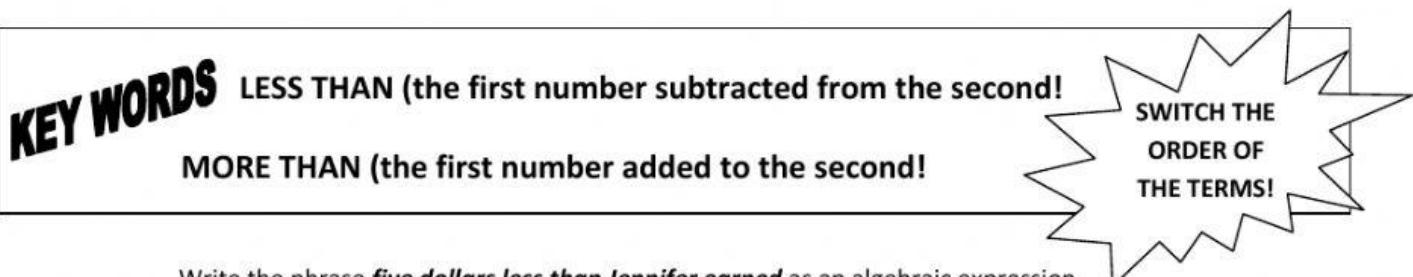
The **DIFFERENCE** of _____ and _____ : _____

The **PRODUCT** of _____ and _____ : _____

The **QUOTIENT** of _____ and _____ : _____

Write each verbal phrase as an algebraic expression.

- 1) the sum of 8 and t
- 2) the quotient of g and 15
- 3) the product of 5 and b
- 4) the difference of 32 and x



Write the phrase five dollars less than Jennifer earned as an algebraic expression.

Key Words	<i>five dollars less than Jennifer earned</i>
Variable	Let d represent # of \$ Jennifer earned
Expression	$d - 5$

- 5) Eight more than x
- 6) Six less than p
- 7) 14 less than f
- 8) p more than 10
- 9) 3 more runs than Pirates scored
- 10) 12 less than some number

KEY WORDS

IS, EQUALS, IS EQUAL TO... Substitute with equal sign.

11) Arthur is 8 years younger than Janet

12) Kelly's test score is 6 points higher than Mike's

13) 5 more than a number is 6.

14) The product of 7 and b is equal to 63.

15) The sum of r and 45 is 79.

16) The quotient of x and 7 is equal to 13.

KEY WORDS

TWICE = DOUBLE = 2 times a number = multiply by 2
HALF = divide the number by 2

17) Twice as many points as Bob

18) Half the age of Sally

Writing Two-Step Expressions and Equations

19) Six less than twice a number x is four

20) Four more than the product of 2 and a

21) Nine times a number decreased by four

22) Two less than the quotient of 15 and a number

23) Five times the sum of six and some number

24) The quotient of 7 and d decreased by 9

25) Twice the difference of y and three

26) The difference of 9 and the quotient of s and -4

27) The **sum of 5 and** product of 7 and x

28) Three more than quotient of 5 and a

29) The product of 4 and the difference of x and 3

30) The product of the difference of x and 3 and 4

YOU MUST USE PARENTHESES to x or $\div a$ (SUM) or (DIFFERENCE)!

Addition Phrases	Expression	Subtraction Phrases	Expression
8 more than a number The sum of 8 and a number x increased by 8 the total of x and 8	$x + 8$	The difference of r and 6 r decreased by 6 6 less than a number 6 subtracted from a number	$r - 6$
Multiplication Phrases	Expression	Division Phrases	Expression
Twice a number The product of 2 and n 2 multiplied by a number 2 times a number	$2n$	The quotient of z and 3 A number divided by 3 The ratio of z and 3	$\frac{z}{3}$

Translate each verbal phrase into an algebraic expression or equation.

1) Seven less than a number is 15 2) The total of 5 and c

3) 7 less than m 4) The sum of a number and 16 is 23

5) the score increased by 8 points 6) The quotient of w and 10 is equal to 7

7) 17 more than some number is 57 8) \$12 less than the original price is \$48

Translate each algebraic expression or equation into a verbal phrase.

9) $9y$ _____

10) $x - 8 = 14$ _____

11) $\frac{y}{12} = 24$ _____

12) $k + 12$ _____

Translate each verbal phrase into an algebraic expression or equation.

13) Seven more than the quotient of a number and 2 is 10. 14) Five less than twice a number is 7.

15) One less than the product of four and a number is 11. 16) Six less than six times a number is 12.

17) Ten more than the quotient of a number and 3 is 12. 18) Seven more than twice a number is 1.

19) The sum of 9 and the quotient of x and 7 is 11. 20) The product of 8 and the difference of n and 3.

Translate each expression or equation into a verbal phrase.

21) $2(5 + t) = 8$ _____

22) $\frac{a}{-2} - 10 = 3$ _____

23) $7(b + 2)$ _____

24) $2c - 5$ _____

25) $17(y + 11)$ _____

26) $3b - 8$ _____

27. The sum of a number and 16 is equal to 45.

28. The product of 6 and m is 216.

29. The difference of 100 and x is 57.

30. The quotient of z and 10 increased by 32.

31. \$18 less than the original price is \$48.

32. 17 more than some number is equal to 85.

33. The number of members divided by 6 is 15.

34. The total of Joshua's savings and \$350 is \$925.