

## Interpret Language in Math Expressions – NOTES Answer Key

Name: \_\_\_\_\_ Class Period: \_\_\_\_\_

### Definitions:

Vocabulary	Definition	Examples
Algebraic Expression (no = sign)	A <del>mathematical</del> statement that includes numbers, operations, and variables to represent a number or a quantity (+, -, x, ÷)	$3x^2 + 5x - 4$
Variable	A letter used to represent a value or unknown quantity that can change or vary	$x, y, n, p$
Term	A number, a variable, or the product of a number and variables	$3x^2, 5x, -4$
Like Terms	Terms that contain the same variables raised to the same power	$4p^3 + 6p - 2p^3 + 5x$ $4p^3, -2p^3$ like terms
Coefficient	The number multiplied by a variable <del>in an algebraic expression</del> (# in front of variable)	$7y^4$ 7 is coefficient
Exponent	The number of times a factor is being multiplied together <del>in an exponential expression</del> ;	$a^b$ b is the exponent $x^4$ 4 is exp.
Base	The factor being multiplied together <del>in an exponential expression</del>	$a^b$ a is the base $x^4$ x is base
Constant	A quantity that does not change (number that's alone)	$6x^2 + 2x + 5$ 5 is constant
Factors	One of two or more numbers or expressions that when multiplied produce a given product	<u><math>3x^2 + 5x - 4</math></u> $3, x^2, 5, x$

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# PEMDAS

HW Prob.

Order of Operations	The order in which expressions are evaluated from left to right  (grouping symbols, exponents, multiplication and division, addition and subtraction)	
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Translations: Fill in the appropriate words for each math operation.

<del>Half</del>	<del>Decreased</del>	<del>Take away</del>	<del>Double</del>
<del>Plus</del>	<del>Twice</del>	<del>Increased</del>	<del>Add</del>
<del>Triple</del>	<del>Less Than</del>	<del>Cubed</del>	<del>Times</del>
<del>More Than</del>	(swaps the order)	<del>Minus</del>	<del>Together</del>
<del>Difference</del>	<del>Raised to a power</del>	<del>Quotient</del>	<del>Square</del>
<del>To the power of</del>		<del>Product</del>	
<del>Sum</del>		<del>Divide by</del>	

Addition- (6 words)

Plus, more than, sum, increased, add, together

Subtraction- (5 words)

Difference, decreased, less than, take away, minus

Division- (3 words)

Half, quotient, divide by

Multiplication- (5 words)

twice, product, double, times, triple

Exponents- (4 words)

To the power of, raised to a power, cubed, square

1. The sum of a number and 10

$$x + 10$$

2. The product of 9 and x squared

$$9x^2$$

3. 9 less than g to the fourth power

$$g^4 - 9$$

4.  $8 + 3x$

Eight more than 3 times X