

Interpret Language in Math Expressions

Name _____ Date _____

| Vocabulary | Definition | Examples |
|----------------------|--|---|
| Algebraic Expression | A mathematical statement that includes numbers, operations, and variables to represent a number or a quantity *Expression has NO equal sign* Standard form: exponents from greatest to least | *Standard form* $3a^3 + 2a^2 + a + 5$ = or $4a^2 + 5a^4 + 3a^5 + 2a$ |
| Variable | A letter used to represent a value or unknown quantity that can change or vary | x, y, a |
| Term | A number, a variable, or the product of a number and variables *Terms separated by operation signs. | $4a^2, 3a^5$ |
| Like Terms | Terms that contain the same variables raised to the same power | $5a^5 + 6a^5$ ✓ $4a^3 + 2a^4$ X $2a^2 + 3x^2$ X |
| Coefficient | # in front of variable The number multiplied by a variable in an algebraic expression Leading coefficient: Standard form, 1 st coefficient | $3x \Rightarrow 3$ is coeff. |
| Exponent | The number of times a factor is being multiplied together in an exponential expression | In a^b , b is the exponent $x^2 = x \cdot x$ |
| Base | The factor being multiplied together in an exponential expression | In a^b , a is the base |
| Constant | A quantity that does not change # w/o a variable | $3x + 5$ |
| Factors | One of two or more numbers or expressions that when multiplied produce a given product | $25 = 5 \cdot 5$ $x^2 = x \cdot x$ $12 = 6 \cdot 2$ $xy = x \cdot y$ |

| | | |
|---------------------|---|---------|
| Order of Operations | The order in which expressions are evaluated from left to right (grouping symbols, exponents, multiplication and division, addition and subtraction) | PEMDAS. |
|---------------------|---|---------|

Independent variable: it doesn't depend on the other variable. X

dependent variable: it's dependent on the independent variable

Translations: Fill in the appropriate words for each math operation. Y

- ~~Half~~
- ~~Plus~~
- ~~Triple~~
- ~~More Than~~
- ~~Difference~~
- ~~To the power of~~
- ~~Sum~~

- ~~Decreased~~
- ~~Twice~~
- ~~Less Than~~
(swaps the order)
- ~~Raised to a power~~

- ~~Take away~~
- ~~Increased~~
- ~~Cubed~~
- ~~Minus~~
- ~~Quotient~~
- ~~Product~~
- ~~Divide by~~

- Double
- Add
- Times
- Together
- Square

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)

Triple Double
Twice Times

Exponents- (4 words)

To the power of
Raised to a Power

cubed
Square