

# WRITING EXPRESSIONS

Review the different ways the mathematical operations can be stated. List as many synonyms as you can think of in the columns below.

**ADDITION:** sum, add, more than, plus, increase, combined, total, altogether, gain

**SUBTRACTION:** difference, less than, minus, subtract, decreased, fewer than, loss

**MULTIPLICATION:** product, times of, multiply, double, triple, \*per, each

**DIVISION:** divided by, quotient, split, half, shared equally, \*per, each

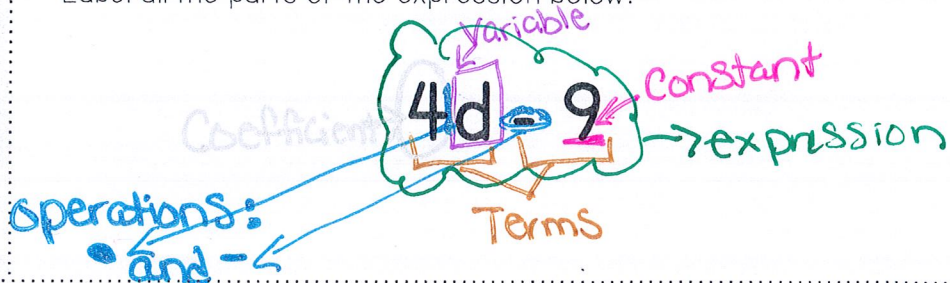
**EQUALS:** is, same

## Algebraic EXPRESSION

NO = sign

- Verbal statements can be translated to algebraic expressions. It is like deciphering a secret message or translating from one language to another.
- An expression is a mathematical phrase that contains Algebraic Numbers, Variables, and Operations.
- It does not contain an = sign. \*

## PARTS OF AN EXPRESSION



Write an algebraic expression to represent the verbal expression.

1. eight more than a number

$$n + 8$$

2. the difference between a number and five

$$x - 5$$

3. nineteen added to a number

$$r + 19$$

Write an algebraic expression to represent the verbal expression.

4. six less than n <i>n - 6</i>	5. the difference of ten and q	6. nineteen added to j	7. fourteen increased by b
8. k less seven	9. twelve less than p	10. the sum of g and eleven	11. t decreased by three

Multiplication is \_\_\_\_\_ side-by-side with the \_\_\_\_\_ in front of the \_\_\_\_\_.

the product of nine and n	q times twelve	twice a number, n	sixteen multiplied by j

With division you must determine which term is the \_\_\_\_\_ and which is the \_\_\_\_\_.

k divided by ten	the quotient of x and six	nine divided by c	the quotient of four and q

**equation**

- An equation shows that one expression is equal to another expression.
- It contains an equal sign.

Write an expression or an equation based on the information below.

1. four times w is 18	2. n divided by seven
3. one-third the sum of eleven and p	4. fourteen is half of g
5. the product of r and nine is forty-five	6. the difference between five and b
7. the quotient of s and eight	8. the quotient of m and five, plus nine

# VARIABLES AND EXPRESSIONS

a. Variable-

b. Expression-

Words That Have Mathematical Meanings			
Addition	Subtraction	Multiplication	Division

\*Remember- any unknown quantity is represented with a \_\_\_\_\_.

Words to Expressions		Expressions to Words	
a number of socks divided into pairs (groups of 2)		$n + 6$	
the product of nine and a number		$h - 9$	
a number increased by 12		$4r$	
4 less than a number		$15 \div p$	

## EXIT SLIP

NAME \_\_\_\_\_

Write the correct expression or phrase for each item below.

1. a dozen eggs with a number missing

2.  $5k$

3. 5 times as many students

4.  $t - 7$