

Reteaching Page

2.1 Variables and Expressions

Variable – a letter or symbol that stands for a number that can change.

Constant – an amount that can **not** change

Algebraic Expression – a mathematical phrase that contains at least 1 variable

$7 + y = 10$; y is a variable and 7 is a constant.

Substitute – replace a variable with a number.

Often you will be asked to evaluate an algebraic expression by substituting a value for a variable. You simply replace the variable with the value you are given and find the solution.

Evaluate the expression: $8 + n$, for $n = 5$

Replace the n with 5... $8 + 5 = 13$

The value of $8 + n$ is 13 when n is 5.

Evaluate the expression for the given value of the variable.

1. $n + 12$, for $n = 3$

3. $36 \div n$, for $n = 9$

2. $7n$, for $n = 6$

4. $18 - n$, for $n = 10$

As you can see, if you change the given value for the variable, the solution will change. Let's examine solution tables for expressions and see how this works.

$13 + n$	
n	solution
1	14
2	15
3	16

When n is 1, the solution is 14.

When n is 2, the solution is 15.

This is the same concept as the pattern tables that you made in a recent lesson.

To find an expression for the table, look for the pattern.

n	solution
5	10
6	12
7	14

When n is 5, the solution is 10.

When n is 6, the solution is 12.

When n is 7, the solution is 14.

The pattern is $n * 2$, so the expression is $n * 2$ or $2n$

$2n$	
n	solution
5	10
6	12
7	14

Find the expression for each table.

n	solution
3	9
4	10
5	11

a	solution
15	5
12	4
9	3

d	solution
21	15
20	14
19	13

b	solution
5	25
6	30
7	35