**1.3 – Algebraic Expressions**

**Reminder:** An algebraic expression is a mathematical expression containing a variable.

In the expression ***7n + 2****,*

7 - is the ***numerical coefficient***

2 - is the ***constant term***

n - is the ***variable***

Here are some other algebraic expressions and their meanings. In each case, *n* represents the number.

**Expression Meaning(s)**

*n + 3 or 3 + n* A number plus three

 Three added to a number

 A number increased by three

 Three greater than a number

 The sum of a number and three

*n – 6*  A number minus six

 Six less than a number

 A number decreased by six

 A number subtracted by six

 The difference between a number and six

*6 – n*  Six minus a number

 A number less than six

 Six decreased by a number

 Six subtracted by a number

 The difference between six and a number

*4n* Four times a number

 A number times four

 The product of four and a number

$\frac{n}{7}$ A number divided by seven

 The quotient of a number and seven

$\frac{7}{n}$ Seven divided by a number

 The quotient of seven and a number

**Example 1:** Write each algebraic expression in words.

a) *6m + 5* b) *4 – 2k* c) $\frac{n}{3}$ *+ 8* d) *5(p – 4)*

**Answers:**

a) Six times a number add five

b) Four subtract two times a number

c) Divide a number by three, then add eight

d) Subtract four from a number, then multiply by five

When we replace a variable with a number in an algebraic expression, we ***evaluate*** the expression. We are just finding the value of the expression for a particular value of the variable.

**Example 2:** Evaluate for the value of the variable given.

a) *3k + 4* for *k = 5* b) 30 *–* $\frac{w}{4}$ for *w = 16*

**Answers:**

a) 3(5) + 4 b) 30 *–* $\frac{(16)}{4}$

 = 15 + 4 = 30 – 4

 = 19 = 26

\*\*Always remember to use the order of operations (BEDMAS)!!