

**Writing Expressions**

**Objective:** You will learn to translate phrases and situations into mathematical expressions.

**Terms:**

**Sum:** the result of adding numbers

**Difference:** the result of subtracting numbers

**Product:** the result of multiplying numbers

**Quotient:** the result of dividing numbers

<b><u>Addition</u></b>	<b><u>Subtraction</u></b>	<b><u>Multiplication</u></b>	<b><u>Division</u></b>
plus more than increased by added sum	minus less less than decreased by difference	times product of doubled (two times) of	divided by divided into quotient of goes into each
<b><u>Others:</u></b>	<b><u>Others:</u></b>	<b><u>Others:</u></b>	<b><u>Others:</u></b>



To write an expression, determine:

Step 1: which operation is being used, and then

Step 2: substitute an operation sign for the corresponding words.

Step #3: assign the unknown value a variable

Step #4: translate the number words into numbers, and



**Example #1: Sally has three more apples than Georgia.**

↓       ↓       ↓  
**3       +       a**

**The expression is:  $3 + a$**

If Georgia's apples are:  $a$

Then, Sally's apples must be:  $3 + a$



**Example #2: What is the product of 20 and  $k$ ?**

↓       ↓       ↓  
**•       20       k**

Product means multiplication. Therefore, the expression is:

**$20k$**



**YOU GOT THIS**

**Write as an expression.**

1. Seven more than  $k$
2. Three times the value of  $w$
3.  $m$  divided by 3
4. 5 less than  $b$
5. 10 less than  $k$
6. One-third of  $a$
7. 17 times  $s$
8.  $p$  cubed
9.  $y$  to the fourth power
10.  $z$  doubled

**Now, let's write expressions and evaluate for the values given:**

11. What is the sum of 4 and  $d$ ?  $d = 9$
12. Nick and Sarah each sold  $t$  candy bars and Jake sold 5 more. How many bars were sold all together?  $t = 6$
13. All 20 kids in the class each spent  $n$  at Blue Moon, except for Mrs. Doolan, who spend \$6.75. How much money was spent at Blue Moon?  $n = \$5.00$