Translating Words Into Algebraic Expressions

ADDITION

Word or Phrase	Example	Numerical Expression
Sum of	The sum of –5 and 3	-5+3= -2
Added to	6 added to 3	6+3=9
More than	7 more than –3	-3+7=4
Increased by	2 increased by 5	2+5=7
Plus	3 plus 14	3+14=17
Greater than	9 greater than -1	-1+9=8

SUBTRACTION

Word or Phrase	Example	Numerical Expression
Difference between	The difference between 4and –7	4-(-7)= 11
Subtracted from	6 subtracted from 9	9-6= 3
From …, subtract …	From 12, subtract 8	12-8= 4
Less	6 less 5	6-5= 1
Less than	6 less than 5	5-6= -1
Decreased by	10 decreased by 3	10-3= 7
Minus	4 minus 2	4-2= 2
Smaller than		
Fewer than		
diminished by		

MULTIPLICATION

Word or Phrase	Example	Numerical Expression
Product of	The product of (-2) and 5	(-2)(5) = -10
Times	4 times 3	(4)(3)= 12
Twice (meaning 2 times)	Twice 5	2 (5)= 10
Of (used with fractions)	One half of ten	½(10)= 5
Percent of	12 percent of –6	0.12 (-6)= -1.92
As much as	2/3 as much as 30	2/3(30)= 20

DIVISION

Word or Phrase	Example	Numerical Expression
Quotient of	The quotient of 8 and 2	8/2= 4
Divided by	21 divided by 3	21/3= 7
Ratio of	The ratio of 2 and 3	2/3

EQUALITY

Substitute any of these words with an equals(=) sign:		
are	A result of	equals
is	yields is equal to	will be

UNKNOWN VARIABLE

If a quantity is unknown, substitute a letter such as "x" for an unknown amount, a number, a value.
Example: Three times a number minus six is equal to twenty seven **MEANS** **3x - 6 = 27**

Translate "the sum of 8 and y" into an algebraic expression.