

## Translating Verbal Expressions – Terms

### ADDITION:

the sum of	<i>the sum of</i> a number and three	$n + 3$
	<i>the sum of</i> a number and another number	$x + y$
the total of	<i>the total of</i> a number and three	$n + 3$
increased by	a number <i>increased by</i> three	$n + 3$
more than	three <i>more than</i> a number	$n + 3$
added to	three <i>added to</i> a number	$n + 3$

### SUBTRACTION:

the difference of	<i>the difference of</i> a number and three	$n - 3$
decreased by	a number <i>decreased by</i> three	$n - 3$
less than	three <i>less than</i> a number	$n - 3$
minus	a number <i>minus</i> three	$n - 3$
subtracted from	three <i>subtracted from</i> a number	$n - 3$

### MULTIPLICATION:

the product of	<i>the product of</i> a number and three	$n \cdot 3$ or $3n$
times	three <i>times</i> a number	$3n$
twice, thrice	<i>twice</i> an number, <i>thrice</i> a number	$2n, 3n$
multiplied by	four <i>multiplied by</i> a number	$4n$
of	three-fourths <i>of</i> a number	$(\frac{3}{4})n$

### DIVISION:

the quotient of	<i>the quotient of</i> a number and three	$n/3$
divided by	a number <i>divided by</i> three	$n/3$
ratio of	the <i>ratio of</i> a number and three	$n/3$

### POWER:

square of	the <i>square of</i> a number	$x^2$
cube of	the <i>cube of</i> a number	$x^3$

### CONSECUTIVE INTEGERS:

consecutive integers	three <i>consecutive integers</i>	$x, x + 1, x + 2$
consecutive even integers	three <i>consecutive even integers</i>	$x, x + 2, x + 4$
consecutive odd integers	three <i>consecutive odd integers</i>	$x, x + 2, x + 4$

### EQUATIONS & INEQUALITIES

is, is equal to, represents	a number <i>is</i> four	$n = 4$
is greater than (or equal to)	a number <i>is greater than (or equal to)</i> four	$n > 4, n \geq 4$
is less than (or equal to)	a number <i>is less than (or equal to)</i> four	$n < 4, n \leq 4$

### NOTICE where and occurs:

the sum of $x$ and $y$	<i>and</i> means +	$x + y$
the difference between $x$ and $y$	<i>and</i> means -	$x - y$
the product of $x$ and $y$	<i>and</i> means •	$x \cdot y$

## Examples for Translating Sentences

1. The sum of twice a number and three  $2x + 3$
2. Twice the sum of a number and three  $2(x + 3)$
3. The difference of four times a number and six  $4x - 6$
4. Four times the difference of a number and six  $4(x - 6)$
5. The total of five times a number and ten is the opposite three  $5x + 10 = -3$
6. Twice the product of three and a number  $2(3x)$
7. The product of four times a number and negative two is five  $4x(-2) = 5$
8. Three less than a number is greater than two  $x - 3 > 2$
9. Six plus five times a number is less than the sum of the number and one  $6 + 5x < x + 1$
10. The sum of two consecutive integers is equal to nine  $x + x + 1 = 9$
11. The sum of two consecutive odd (or even) integers  $x + x + 2$
12. Four less than three-fourths of a number  $\frac{3}{4}x - 4$
13. The difference of a number squared and five is equal to thrice the number  $x^2 - 5 = 3x$
14. The sum of the angles of a triangle  $a + b + c = 180^\circ$