Translating Verbal Expressions – Terms

**ADDITION:**
- the sum of
- the total of
- increased by
- more than
- added to

- the sum of a number and three \( n + 3 \)
- the sum of a number and another number \( x + y \)
- the total of a number and three \( n + 3 \)
- a number increased by three \( n + 3 \)
- three more than a number \( n + 3 \)
- three added to a number \( n + 3 \)

**SUBTRACTION:**
- the difference of
- decreased by
- less than
- minus
- subtracted from

- the difference of a number and three \( n - 3 \)
- a number decreased by three \( n - 3 \)
- three less than a number \( n - 3 \)
- a number minus three \( n - 3 \)
- three subtracted from a number \( n - 3 \)

**MULTIPLICATION:**
- the product of
- times
- twice, thrice
- multiplied by

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

**DIVISION:**
- the quotient of
- divided by
- ratio of

- the quotient of a number and three \( \frac{n}{3} \)
- a number divided by three \( \frac{n}{3} \)
- the ratio of a number and three \( \frac{n}{3} \)

**POWER:**
- square of
- cube of

- the square of a number \( x^2 \)
- the cube of a number \( x^3 \)

**CONSECUTIVE INTEGERS:**
- consecutive integers
- consecutive even integers
- consecutive odd integers

- three consecutive integers \( x, x + 1, x + 2 \)
- three consecutive even integers \( x, x + 2, x + 4 \)
- three consecutive odd integers \( x, x + 2, x + 4 \)

**EQUATIONS & INEQUALITIES**
- is, is equal to, represents
- is greater than (or equal to)
- is less than (or equal to)

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

**NOTICE where and occurs:**
- the sum of \( x \) and \( y \) and means + \( x + y \)
- the difference between \( x \) and \( y \) and means - \( x - y \)
- the product of \( x \) and \( y \) and means • \( x \times y \)
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 \(a + b + c = 180^\circ\)