

## Quadratic Function

**A function that can be represented by  $y = ax^2 + bx + c$ , where  $a$  and  $b$  are coefficients,  $a \neq 0$ , and  $c$  is a constant number. The greatest exponent in the function is 2, therefore the function is said to have a degree of 2.**

## **Coefficient**

**The constant part of a term in an expression.**

**Example:**

**In the expression  $2x^2 + 3x - 9$ ,  $2$  is the coefficient in the term  $2x^2$ .**


## **Quadratic Sequence**


**A sequence whose terms are generated by a quadratic function.**

# QUADRATIC SEQUENCES

## EXAMPLE:

1. 2, 6, 12, 20, 30, 42

$D_1$  4 6 8 10 12 

$D_2$  2 2 2 2 

$D_1$  is not constant, therefore this is not an Arithmetic Sequence

$D_2$  is constant, therefore this is a QUADRATIC Sequence