# The City School

## **Past Paper Questions**

### Algebra

(Quadratic Equations)
MATHEMATICS





#### Encircle the correct option.

01. Solve the equation  $4x^2 - 16 = 0$ 

A) -2 or 2

B) 2 or -4

C) -1 or 1

D) 0 or 1

02. If  $a^2 - 121 = 0$ , then value of a is

A) 11

R) 12

C) ±11

D) 13

03) If (x - 3) (x + 2) = 0, then the value of x is

A) 3, -2

B) -3, -2

C) -3, 2

D) 3, 2

04) What are the values of x in the solution of  $x^2 - 49 = 0$ 

A) x = 7 or x = -7

B) x = -7 or x = -7

C) x = 7 or x = 7

#### **Ouestions**

Q no 01) Solve the equations

 $1. x^2 - 3x + 18 = 0$ 

II.  $a^2 - 9 = 0$ 

III.  $3x^2 - 11x + 8 = 0$ 

IV.  $4x^2 - 9 = 0$ 

 $V. \frac{4}{x+3} = \frac{x-1}{3}$ 

Q no. 02) The sum of a positive integer x and its square is 56.

I. Write an equation in x to present this information.

II. Solve the equation to find the integer x.

Q no. 03) Find two consecutive positive even numbers such that the square of their sum is 100.

Q no. 04) The length and breadth of a rectangle are (x + 2) cm and x cm respectively. If the area of the rectangle is  $120 \text{ cm}^2$ , find I. The value of x

II. The perimeter of this rectangle.

Q no. 05) The sum of the squares of two consecutive numbers is 145. Calculate the numbers.

Q no. 06) The sum of the square of two consecutive odd numbers is 290. Find the numbers.