## PRABHU DAYAL PUBLIC SCHOOL

## Mathematics (2025-26)

Class - IX

## Assignment – 3

- 1. Find out the factors of  $x^2 + 3\sqrt{2}x + 4$
- 2. Find the value of the polynomial  $12x^2 7x + 1$ , when  $x = \frac{1}{4}$ .
- 3. Verify that whether -2 and 3 zeroes of the polynomial  $x^2 x 6$ .
- 4. Expand  $(2x 3y + 7z)^2$
- 5. If a + b + c = 9 and ab + bc + ca = 26, find  $a^2 + b^2 + c^2$ .
- 6. Show that a diagonal of a parallelogram divides it into two congruent triangles.
- 7. Prove that the diagonals of a square are equal and perpendicular to each other.
- 8. Find out the class marks of the class 92-120.
- 9. Find out the sum of class marks of the classes 10-14 and 20-30.
- 10. The mid value of a class interval is 42. If the class size is 10, then find out the upper and lower limit.