**CLASS – X**

**Chapter – 2nd (Polynomial)**

1. Find the zeroes of the quadratic polynomial **7y2 - y -** and verify the relationship between the zeroes and the coefficients.
2. Find the value of **k** such that the polynomial **x2 – (k + 6)x +2(2k - 1)** has sum of its zeroes equal to half of their product.
3. Find a quadratic polynomial, the sum and product of whose zeroes are 0 and - respectively. Hence find the zeroes.
4. Find a quadratic polynomial whose zeroes are reciprocals of the zeroes of polynomial f(x) = ax2 + bx + c, a ≠ 0, c ≠ 0.
5. Find a quadratic polynomial, the sum and product of whose zeroes are – 3 and 2, respectively.
6. Find the zeroes of the quadratic polynomial x2 + 7x + 10, and verify the relationship between the zeroes and the coefficients.
7. If α and β are zeroes of the polynomial 2x2 – 5x + 7, then find the value of α-1 + β-1.
8. If p and q are the roots of ax2 – bx + c = 0, a ≠ 0, then find the value of p + q.
9. Find the quadratic polynomial whose sum of zeroes is 8 and their product is 12. Hence find zeroes of polynomial.
10. If α and β are zeroes of x2 + 7x + 12, then find the value of 1/α+1/β – 2αβ