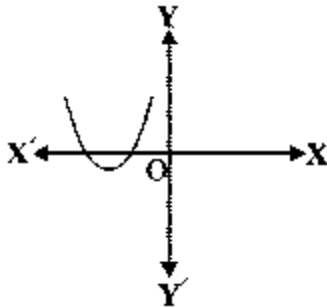


CBSE TEST PAPER-03

MATHEMATICS (Class-10)

Chapter 2. Polynomials

1. The graphs of $y = p(x)$ are given in the figure below, a polynomial $p(x)$. Find the number of zeroes. (1 mark)



2. Write the zeroes of the polynomial $x^2 - 2x - 8$. (1 mark)
3. Give an example of polynomials $f(x)$, $g(x)$, $q(x)$ and $r(x)$ satisfying that $f(x) = g(x) \cdot q(x) + r(x) = 0$. (1 mark)
4. The sum and product of the zeroes of a quadratic polynomial are $-1/2$ and -3 respectively. What is the quadratic polynomial? (2 marks)
5. Find the quadratic polynomial, the sum and product of whose zeroes are given as 4 and 1, respectively. (2 marks)
6. If α and β are the zeros of a given quadratic polynomial $f(x) = x^2 + x - 2$, find the value of $\frac{1}{\alpha} - \frac{1}{\beta}$. (2 marks)
7. Find the zeroes of the quadratic polynomial $x^2 + 5x + 6$ and verify the relationship between the zeroes and the coefficients. (3 marks)
8. Find the zeroes of the quadratic polynomial $x^2 + 7x + 10$, and verify the relationship between the zeroes and the coefficients. (3 marks)