

CHAPTER: POLYNOMIALS

CBSE TEST PAPER-1

CLASS - X

Choose the correct answer from the given four options in the following questions:

- If one of the zeroes of the quadratic polynomial $(k-1)x^2 + kx + 1$ is -3 , then the value of k is
 (A) $4/3$ (B) -43 (C) $2/3$ (D) $-2/3$
- A quadratic polynomial, whose zeroes are -3 and 4 , is
 (A) $X^2 - x + 12$ (B) $x^2 + x + 12$ (C) $x^2/2 - x/2 - 6$ (D) $2x^2 + 2x - 24$
- If the zeroes of the quadratic polynomial $x^2 + (a + 1)x + b$ are 2 and -3 , then
 (A) $a = -7, b = -1$ (B) $a = 5, b = -1$ (C) $a = 2, b = -6$ (D) $a = 0, b = -6$
- The number of polynomials having zeroes as -2 and 5 is
 (A) 1 (B) 2 (C) 3 (D) more than 3
- If one of the zeroes of the cubic polynomial $x^3 + ax^2 + bx + c$ is -1 , then the product of the other two zeroes is
 (A) $b - a + 1$ (B) $b - a - 1$ (C) $a - b + 1$ (D) $a - b - 1$
- Find the zeroes of the polynomial $x^2 + 1/6x - 2$, and verify the relation between the coefficients and the zeroes of the polynomial
- Find the zeroes of the following polynomials by factorization method and verify the relations between the zeroes and the coefficients of the polynomials $2s^2 - (1 + 2\sqrt{2})s + \sqrt{2}$
- Find a quadratic polynomial, the sum and product of whose zeroes are 2 and $-3/2$, respectively. Also find its zeroes
- If the remainder on division of $x^3 + 2x^2 + kx + 3$ by $x - 3$ is 21 , find the quotient and the value of k . Hence, find the zeroes of the cubic polynomial $x^3 + 2x^2 + kx - 18$
- Given that $\sqrt{2}i$ is a zero of the cubic polynomial $6x^3 + 2x^2 - 10x - 4\sqrt{2}$, find its other two zeroes.
- Given that $x - \sqrt{5}$ is a factor of the cubic polynomial $x^3 - 3\sqrt{5}x^2 + 13x - 3\sqrt{5}$, find all the zeroes of the polynomial.
- For which values of a and b , are the zeroes of $q(x) = x^3 + 2x^2 + a$ also the zeroes of the polynomial $p(x) = x^5 - x^4 - 4x^3 + 3x^2 + 3x + b$? Which zeroes of $p(x)$ are not the zeroes of $q(x)$?