CLASS-X

Date 18-07-2020

MATHS ASSIGNMENT -2

Quadratic Equation.

Q(1) solve the equation by Factorisation method

(i) $\frac{5}{2x+3} + 3 = \frac{4}{x}$ $(x \neq 0, x \neq -\frac{3}{2})$

(ii) $9x^2 - 6b^2x - (a^4 - b^4) = 0$

(iii) $\frac{x+3}{x+2} = \frac{3x-7}{2x-3}$ $(x \neq -2, x \neq \frac{3}{2})$

Q(2) Solve the equation. by completing the square method

(i) $2x^2 + x - 4 = 0$

(ii) $\sqrt{3}x^2 + 10x + 7\sqrt{3} = 0$

Q(3) Find the nature of the roots of following quadratic equations If the real roots exists Find them.

(i) $3x^2 - 2x + 2 = 0$

(ii) $2x^2 - 2\sqrt{6}x + 3 = 0$

(iii) $3x^2 + 2\sqrt{5}x - 5 = 0$

Q.(4) Find the value of k for which the equation $(k-12)x^2 + 2(k-12)x + 2 = 0$ has equal roots

Q.(5) If 2 is a root of the quadratic eqn. $3x^2 + px - 8 = 0$ and eqn. $4x^2 - 2px + k$ has equal roots Find the value of k.

CLASS – X

MATHS ASSIGNMENT – II

POLYNOMIALS

(1) Find the zeros of the polynomials and verify the relationship between the zeros and the coefficients

(i) $4x^2 + 8x$ (iii) $4x^2 + 5\sqrt{2}x - 3$

(ii) $6x^2 - 3 - 7x$

(2) Find the quadratic polynomial the sum and product of zeros are

(i) $-\frac{8}{3}, \frac{4}{3}$

(ii) $-2\sqrt{3}, -9$

(3) If one of the zeros of the quadratic polynomial $(k+1)x^2 + kx - 1 = 0$ is -2 Find the value of k

(4) If $(x+9)$ is a factor of $2x^2 + 29x + 5x + 10$ Find a

(5) If two zeros of the polynomial $f(x) = x^3 - 4x^2 - 3x + 12$ are $\sqrt{3}$ and $-\sqrt{3}$ Then find its Third zero.