

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date:

Name:

ID No.....

Assignment

1. If the remainder on division of $x^3 - kx^2 + 13x - 8$ by $2x - 1$ is 21 find the quotient and the value of k. Hence, find the zeroes of the cubic polynomial $x^3 - kx^2 + 13x$.

Sol. _____

2. Find k so that $x^2 + 2x + k$ is a factor of $2x^3 + x^2 - 14x^2 + 5x + 6$. Also find all the zeroes of the two polynomials.

Sol. _____

3. Given that $\sqrt{5}$ is zero of the cubic polynomial $x^3 - 3\sqrt{5}x^2 + 13x - 3\sqrt{5}$. Find all the zeroes of the polynomial.

Sol. _____

4. For which values of a and b, are the zeroes of $q(x) = x^3 + 2x^2 + a$ also the zeroes of the polynomial $p(x) = x^3 - x^2 - 4x^2 + 3x^2 + 3x + b$? Which zeroes of p(x) are not the zeroes of q(x)?

Sol. _____

