



INDIAN SCHOOL NIZWA - WORKSHEET

MATHEMATICS CH:2 Polynomials

Name: _____

Date: _____

Class: IX Sec: ____

1. The maximum number of terms in a polynomial of degree 10 is _____.
2. Zero of the zero polynomial is _____ and degree of the zero polynomial is _____.
3. Degree of the constant polynomial is _____.
4. Degree of the polynomial: $(x^3 - 2)(x^2 + 11)$.
5. If $a + b + c = 7$ and $ab + bc + ca = 20$ find the value of: $a^2 + b^2 + c^2$.
6. Simplify: $(\sqrt{x} + \sqrt{y})(\sqrt{x} - \sqrt{y})(x + y)(x^2 + y^2)$.
7. If $2x + 3y = 8$ and $xy = 4$ then find the value of $4x^2 + 9y^2$.
8. If $x^2 + \frac{1}{x^2} = 38$, then find the value of $\left(x - \frac{1}{x}\right)$.
9. If $a^2 + b^2 + c^2 = 90$ and $a + b + c = 20$ then find the value of $ab + bc + ca$.
10. If $x = \frac{-1}{3}$ is a zero of the polynomial $p(x) = 27x^3 - ax^2 - x + 3$ then find the value of a.
11. Using Remainder Theorem, find the value of "k" so that $(x^3 - 2x + k)$ leaves the remainder 3 when divided by $(x + 1)$.
12. Factorise $4a^2 - 4\sqrt{3}a + 3$.
13. Find the value of "k" if $(x - 1)$ is a factor $4x^3 + 3x^2 - 4x + k$.