

Worksheet for Subject-Maths

Class- IX

Topic -Polynomials

Write the coefficients of  $x^2$  in each of the following:

(i)  $2 + x^2 + x$

(ii)  $2 - x^2 + x^3$

(iii)  $x^2 + 2x - 3$

(iv)  $5x^3 + 7x^2 - 2x$

(v)  $2 - 7x^2 + 6x$

1. Write the degree of each of the following polynomials:

(i)  $5x^3 + 7x^2 - 2x$

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

(iii)  $5 - y^2$

(iv)  $x^6 + 8x^2$

(v)  $9 + z - 8z^2 + 5z^3$

2. Classify the following as linear, quadratic and cubic polynomials:

(i)  $x^2 + x$

(ii)  $x - x^3$

(iii)  $y + y^2 + 4$

(iv)  $1 + x$

(vi)  $r^2$

(vii)  $7x^3$

3. Find  $p(0)$ ,  $p(1)$  and  $p(2)$  for each of the following polynomials:

(i)  $p(y) = y^2 - y + 1$

(ii)  $p(t) = 2 + t + 2t^2 - t^3$

(iii)  $p(x) = x^3$

(iv)  $p(x) = (x - 1)(x + 1)$