STD – 9 MATHS

CHAPTER - 2

polynomials

EXERCISE – 2.2 Q : 1,2

1. X ની નીચેની કિંમતો માટે $5x - 4x^2 + 3$ બહુપદીનું મૂલ્ય શોધો :

- $p(x) = 5x - 4x^2 + 3$

$x = 0$

$p(0) = 5(0) - 4(0)^2 + 3$

$= 3$

(ii) x = -1

➢ When x = -1

$f(x) = 5x - 4x^2 + 3$

$f(-1) = 5(-1) - 4(-1)^2 + 3$

$= -5 - 4 + 3$

$= -6$

(iii) x = 2

- When x = 2

$f(x) = 5x - 4x^2 + 3$

$f(2) = 5(2) - 4(2)^2 + 3$

$= 10 - 16 + 3$

$= -3$

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

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

➢ $p(y) = y^2 - y + 1$

$\therefore p(0) = (0)^2 - (0) + 1 = 1$

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

$p(2) = (2)^2 - (2) + 1 = 3$

(ii) $p(t) = 2 + t + 2t^2 - 1^3$

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

$\therefore$ $p(0) = 2 + 0 + 2(0)^2 - (0)^3 = 2$

$p(1) = 2 + 1 + 2(1)^2 - (1)^3 = 2 + 1 + 2 - 1 = 4$

$p(2) = 2 + 2 + 2(2)^2 - (2)^3 = 2 + 2 + 8 - 8 = 4$

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

- $P(x) = x^3$

$\therefore$ $p(0) = (0)^3 = 0$

$p(1) = (1)^3 = 1$

$p(2) = (2)^3 = 8$

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

➢ $P(x) = (x - 1)(x + 1)$

$\therefore p(0)(0 - 1)(0 + 1) = (-1)(1) = -1$

$p(1) = (1 - 1)(1 + 1) = 0\ (2) = 0$

$p(2) = (2 - 1)(2 + 1) = 1\ (3) = 3$

Thanks

For watching