STD – 9 MATHS

CHAPTER - 2

polynomials

EXERCISE - 2.2 Q: 1,2

1. X ની નીચેની કિંમતો માટે 5x - 4x² + 3 બહુપદીનું મૂલ્ય શોધો :

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

$$x = 0$$

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

$$= 3$$

(ii)
$$x = -1$$

 \triangleright When x = -1

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

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

$$= -5 - 4 + 3$$

(iii)
$$x = 2$$

$$\triangleright$$
 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)
$$p(y) = y^2 - y + 1$$

$$\triangleright$$
 p(y) = y² - 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)
$$p(t) = 2 + t + 2t^2 - 1^3$$

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

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

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

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

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

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

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

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

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

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

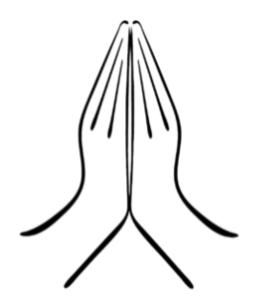
$$P(x) = (x - 1)(x + 1)$$

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

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

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

Thanks



For watching