

PUBLIC SCHOOL DARBHANGA SESSION (2020-21) CLASS-VI

MATHEMATICS POLYNOMIALS

Worksheet no.2

1. Find the value of the polynomial (x)= $5x-4x^2+3$

$$(i) x=0$$

(ii)
$$x = -$$

1

(iii)
$$x = 2$$

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

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

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

(iii)
$$p(x)=x3$$

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

3. Following are zeroes of the polynomial, indicated against them.

(i)
$$p(x)=3x+1, x=-1$$

(ii)
$$p(x)=5x-\pi, x=4$$

5

(iii)
$$p(x)=x^2-1$$
, $x=1$, -1

(iv)
$$p(x)=(x+1)(x-2)$$
, $x=-1$, 2

(v)
$$p(x)=x^2$$
, $x=0$

4. Find the zero of the polynomial in each of the following cases:

(i)
$$p(x) = x + 5$$

(ii)
$$p(x) = x - 5$$

$$(iii)p(x) = 2x + 5$$
 $(iv)p(x) = 3x - 2$

$$(v) p(x) = 3x$$

$$(vi)p(x) = ax, a\neq 0$$

(vii)p(x) =
$$cx + d$$
, $c \ne 0$, c, d are real numbers.

5. Find the remainder when x^3+3x^2+3x+1 is divided by

$$(i)$$
 $x+1$

(ii)
$$x+\pi$$