

SUBJECT –MATHEMATICS,,CLASS-IX
CHAPTER-2 (POLYNOMIALS)
WORKSHEET(BASIC)

Choose the correct option :(3 X 1=3)

1. Degree of the polynomial $4x^4 + 5x + 7$ is
(a) 3 (b) 4 (c) 5 (d) 7
2. The value of the polynomial $5x - 4x^2 + 3$, when $x = -1$ is
(a) -6 (b) 6 (c) 2 (d) -2
3. Zero of the polynomial $p(x) = 2x + 5$ is
(a) $-2/5$ (b) $-5/2$ (c) $2/5$ (d) $5/2$

Fill in the blanks :(2 X 1=2)

4. The coefficient of x^2 in the polynomial $5x^3 - 6x^2 + 9x - 5$ is -----
5. The remainder when $x^3 + 6x^2 - 9x + 13$ is divided by $x + 1$ is -----

Answer the following question (1)

6. If $P(x) = x + 3$, then find the value of $p(x) + p(-x)$.

Short Answer type Questions-I (2X2=4)

7. Expand $(2x + y + 3z)^2$
8. If $x + 1$ is a factor of $ax^3 + x^2 - 2x + 4a - 9$, find the value of a .

Short Answer type Questions-II(2X3=6)

9. Factorise $8x^3 + 64^3$
10. Evaluate $(102)^3$

Long Answer Type Question:(1 X 4)

11. Factorise $27x^3 + y^3 + z^3 - 9xyz$