



TOPIC- POLYNOMIAL

Sub: Mathematics

Class: 9

F. M. 15

WORK SHEET NO. -5

Date: 11.4.2020

Choose the correct answer: $1 \times 15 = 15$

1. If $f(x) = x^3 - 3/x$, then the value of $f(3)$ is _____.
a) 24 b) 25 c) 26 d) 27
2. If $f(x) = 3x + 5$, then $f(x) + f(-x) =$ _____.
a) 6 b) 9 c) 10 d) 15
3. If $8x^3 + 4x + 1$ is divided by $(2x + 1)$, then the remainder will be _____.
a) 1 b) -1 c) 2 d) -2
4. If $(x - 2)$ and $(2x - 1)$ are the factors of the polynomial $px^2 + 5x + r$, then
a) $P > r$ b) $p < r$ c) $p = r$
5. If $(x + 2)$ is a factor of polynomial $x^3 + kx^2 + 10x + 8$, then $k =$ _____.
a) 5 b) -5 c) 10 d) -10
6. The root of the polynomial $f(x) = 2x + 1$ is _____.
a) 0 b) -1 c) $\frac{1}{2}$ d) $-\frac{1}{2}$
7. $(x + 3)$ is a factor of $x^3 + 6x^2 + 12x + k$ if $k =$ _____.
a) 6 b) -6 c) 9 d) -9
8. If 30 is the remainder when $x^3 + 3x^2 + 3x + a$ is divided by $(x - 2)$ then $a =$ _____.
a) 1 b) 2 c) 3 d) 4
9. The zeroes of the polynomial $2x^2 + 4x$ are _____.
a) 0, 2 b) 0, 4 c) 0, -2 d) 0, 1
10. The polynomial $x^2 - x - 12$ is divisible by _____.
a) $x + 2$ b) $x + 3$ c) $x + 4$ d) $x - 2$

11. If $f(x) = x^2 - 3x + 5$, then $f(2) =$ _____.
- a) 1 b) 2 c) 3 d) 4
12. For what value of k will the polynomial $k + 4x - 3x^2 - x^3$ be completely divisible by $(x+3)$?
- a) 10 b) 11 c) 12 d) 14
13. What will be the remainder if $x^3 + 4x^2 + 4x - 3$ is divided by x ?
- a) 0 b) 1 c) 3 d) -3
14. If $f(x) = x^2 + ax + b$ and $f(1) = 1$, $f(2) = 2$ then $f(3) =$ _____.
- a) 3 b) 4 c) 5 d) 6
15. What will be the remainder if polynomial $8x^3 - 4x^2 + 4x + 5$ is divided by $(2x + 1)$?
- a) 0 b) 1 c) 2 d) 3

Debjani Das