



**TOPIC- POLYNOMIAL**

**Sub: Mathematics**

**Class: 9**

**F. M. 15**

**WORK SHEET NO. -5**

**SOLUTION**

**Date: 11.4.2020**

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

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

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

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