Algebraic Expression Worksheet – 1

1. In a polynomial, the exponents of the variables are always non positive integers. Mark True / False.

a) True b) False

2. The product of monomial and binomial is a monomial. Mark True / False.

a) True b) False

3. The product of two polynomial is a polynomial. Mark True / False.

a) True b) False

4. $(p + q)^2 = p^2 + q^2$. Mark True / False.

a) True b) False

5. The product of two negative term is positive. Mark True / False.

a) True b) False

6. $(p – q)^2 = p^2 – q^2$. Mark True / False.

a) True b) False

7. $(p + q)(p – q) = p^2 – q^2$. Mark True / False.

a) True b) False

8. The numerical coefficient in $–24a^2bc$ is –24. Mark True / False.

a) True b) False

9. $2x^2 + x^2y^2 + xz$ is a binomial. Mark True / False.

a) True b) False

10. An equation is true for all values of its variables. Mark True / False.

a) True b) False

11. Subtract $-5x^2y^2$ from x^2y^2, then we get ____?

a) $6x^2$ b) $-6x^2$

c) $4x^2$ d) $– 4x^2$

12. Like term as $3a^4b^2$ is _____?

a) $4a^2b^3$ b) $-4a^4b^2$

c) $5a^3b^2$ d) $6a^2b^3$

13. Identify the pair of like term from below option.

a) $5x^2yz$, $5xyz$ b) 3y, 3z

c) $2ab^2c$, $-8ab^2c$ d) 5pq, - 3qr

14. In $(-\frac{37}{51}x^2yz^3)$, write the coefficient of $– yz^3$.

a) $\frac{37}{51}$ b) x^2

c) $\mathbf{\frac{37}{51}}x^2$ d) None of these

15. Which of the following expression is polynomial?

a) $a^2 + b^2 + ab + a^2b^2$ b) $y^2 + \sqrt{5x} + 3$

c) $p + \sqrt{q}$ d) $a - \frac{1}{a}$

16. Write the degree of $x^4 - x^3 + 2x^2 - 7$.

a) 3 b) 2

c) 4 d) x^2

17. Find out the value of $4x^3 - 2x^2 + 5x - 4$, when x = 3.

a) 101 b) -101

c) 100 d) 98

18. If a = 3, b = 5, c = -2, then find the value of $a^4 + b^3 + c^2 - 2a^2b + 3abc$.

a) -156 b) 156

c) 198 d) 90

19. Identify binomial from below.

a) $\frac{3y}{z}$ b) $5p \times 2q \times 3r^2$

c) 2y + 7 d) $\frac{1}{2}x^2y^3z^4$

20. A polynomial of degree 2 is called _____?

a) Linear b) Cubic

c) Constant d) Quadratic