

Practice Set of Algebraic Expressions

1. Draw a tree diagram for the given expression

$$9p^4q^2 - 8pqr^3 + 17p^6 - 24$$

2. Identify the type of polynomials for the given expressions

i) $5m - 7n + 2m - 9n$

ii) $3x^2 + 4xy - 2y^2 - 9yx$

3. Identify the terms containing x^3 and find its co-efficient for the following expressions

i) $3y^3x^2 - 5y^4x^2 - 9z^3x^3y + 5y^2x^3$

ii) $50x^2 - 90xy^3 + 70x^2y^3 - 23x^3y$

4. Terms are _____ to form any expressions.

5. Subtract $p^2r^5 - 9pr^2 + 7pr^5$ from $2p^2r^5 - 7p^2r - 5r^5p$.

6. Say True or False: $9m^4 - 3n^2 + 2p^8$ is a polynomial.

7. Find the value of the expression for $x = -1$, $y = -2$, $z = 0$ and $a = -3$

$$3x^2yz - 9a^3y^4 + 81a^{10}a^{50}y^{100}z - 20$$

8. Simplify : $2(x^2 - 3x + 5) - 5(3x^4 - 2x^3 - 3x^2) + 4(6x - 7)$