

Board – ICSE

Class –VIII

Topic –Algebraic Expressions

1. Add: $5x^2 + 7y - 8$, $4y + 7 - 2x^2$ and $6 - 5y + 4x^2$
2. Add: $a^2 + b^2 + c^2 - 3abc$ and $a^2 - b^2 + c^2 + abc$
3. Subtract $3x^2 - 6x - 4$ from $5 + x - 2x^2$
4. $x + y - 3z$ from $9x - 5y + z$
5. Find products: $5a^2b^2 \times (3a^2 - 4ab + 6b^2)$
6. Divide: $20x^3y + 12x^2y^2 - 10xy$ by $2xy$
7. Find the quotient and remainder when $(7 + 15x - 13x^2 + 5x^3)$ is divided by $(4 - 3x + x^2)$.
8. Simplify: $x^5 \div x^7 \times x^4$
9. Coefficient of x in the term $-\frac{x}{5}$ is ?
10. Divide: $8x^2 - 45y^2 + 18xy$ by $2x - 3y$
11. The product of two numbers is $16x^4 - 1$. if one of them is $2x - 1$, find the other.
12. Simplify: $2[6 + 4\{m - 6(7 - (\overline{n + p}) + q)\}]$

ANSWER

1. $7x^2 + 6y + 5$
2. $2a^2 + 2c^2 - 2abc$
3. $-5x^2 + 7x + 9$
4. $7x - 6y + 4z$
5. $15a^4b^2 - 20a^3b^3 + 30a^2b^4$
6. $10x^2 + 6xy - 5$.
7. Quotient is $(5x + 2)$ and remainder is $(x - 1)$.
8. x^2
9. $-\frac{1}{5}$
10. $4x + 15y$
11. $8x^3 + 4x^2 + 2x + 1$
12. $8m + 48n + 48p + 8q - 324$