



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Algebra and Geometry

Class: 7

Date: 08.07.20

Duration: 40 min

Worksheet 51

Full Marks: 15

ALGEBRAIC EXPRESSIONS

Choose the Correct options:

- Find the sum. Find the sum.
 $(2x^2 + 5x - 7) + (3 - 4x^2 + 6x)$
 - $2x^2 + 3x + 1$
 - $-2x^2 - 11x - 4$
 - $2x^2 + 5x - 7$
 - $-2x^2 + 11x - 4$
- Find the difference.
 $(3 - 2x + 2x^2) - (4x - 5 + 3x^2)$
 - $x^2 + 6x + 8$
 - $2x^2 + 5x - 7$
 - $-x^2 - 6x + 8$
 - $-2x^2 + 11x - 4$
- Find the sum.
 $(3y^2 + y^3 - 5) + (4y^2 - 4y + 2y^3 + 8)$
 - $3y^3 + 7y^2 - 4y + 3$
 - $4y^2 + 3y^3 - y + 3$
 - $-y^4 + 2y^3 - y - 4$
 - $4y^3 + 3y^2 - 3y + 1$
- Add the polynomials.
 $(2x + 5y) + (3x - 2y)$
 - $3x + 5y$
 - $5x + 3y$
 - $5x + 7y$
 - $7xy + 1xy$
- Simplify the expression.
 $(4n^4 - 8n + 4) - (8n^2 + 4n^4 + 1)$
 - $-8n^2 - 8n + 3$
 - $-7n^2 - 8n + 3$
 - $-6n^2 - 8n + 3$
 - $-7n^2 - 4n + 3$
- Simplify each expression.
 $(6b^3 + 6 - b^4) - (8b^3 - 6b^4 + 2)$
 - $4b^4 - 2b^3 + 7$
 - $5b^4 - 2b^3 + 4$
 - $b^4 - 2b^3 + 7$
 - $5b^4 - 2b^3 + 7$
- Simplify each expression.
 $(6x + 4x^4 - 3x^2) + (7x^4 + 5x^2 + 8x)$
 - $11x^4 + 2x^2 + 14x$
 - $16x^4 + x^2 + 14x$
 - $11x^4 + x^2 + 14x$
 - $11x^4 + 2x^2 + 10x$
- Simplify each expression.
 $(4n^4 - 8n + 3) - (8n^2 + 4n^4 + x)$
 - $-8n^2 - 8n - x + 3$
 - $-7n^2 - 8n + x + 3$
 - $-6n^2 - 8n - x + 3$
 - $-7n^2 - 4n + x + 3$

9. Simplify the expression.
 $(4a^3 - 8a - 4a^2) + (7a^3 - 7 - 6a)$
 a) $11a^3 - 4a^2 - 14a - 7$
 b) $5a^3 - 4a^2 - 14a - 7$
 c) $5a^3 - 4a^2 - 20a - 7$
 d) $5a^3 - 9a^2 - 20a - 7$
10. $(x^3 - x^2 + 4) - (3x^3 - 2x^2 + 3)$
 a) $-2x^3 - 3x^2 + 7$
 b) $-2x^3 + x^2 + 1$
 c) $2x^3 - 3x^3 - 1$
 d) $4x^3 - 3x^2 + 7$
11. $(3x^2 - 6x + xy) + (2x^3 - 5x^2 - 3y) + (7x + 8y)$
 a) $2x^3 - 8x^2 + x + xy + 5y$
 b) $2x^3 - 2x^2 + x + xy - 5y$
 c) $2x^3 - 2x^2 + x + xy + 5y$
 d) $2x^3 - 2x^2 - x + xy + 5y$
12. $(2x^2 - 4y + 7xy - 6y^2) - (-3x^2 + 5y - 4xy + y^2)$
 a) $-5x^2 + 9y - 11xy + 7y^2$
 b) $-x^2 + y + 3xy - 5y^2$
 c) $-x^2 - 9y + 11xy - 7y^2$
 d) $5x^2 - 9y + 11xy - 7y^2$
13. $(3x^2 - 5x + 8y + 7xy + 2y^2) - (4x^2 + 2x - 3y + 7xy - 3y^2) =$
 a) $-x^2 - 7x + 11y + 5y^2$
 b) $x^2 + 7x + 11y - y^2$
 c) $7x^2 - 3x + 5y + 14xy - y^2$
 d) $-x^2 - 7x + 11y + 14xy + 5y^2$
14. $(5x^4 - 2x^2 + 4x - 3) - (5x^4 + 3x^3 - 4x + 3)$
 a) $-3x^3 - 5x^2 + 8x - 6$
 b) $-3x^3 - 2x^2 + 8x - 6$
 c) $-3x^3 - 2x^2$
 d) $3x^3 - 2x^2$
15. $(4x^4 - 3x^3 + x^2 - 5x + 11) - (-3x^4 + 6x^3 - 8x^2 + 4x - 3)$
 a) $x^4 - 3x^3 + 7x^2 - 9x + 14$
 b) $x^4 + 3x^3 - 7x^2 - x + 8$
 c) $7x^4 - 9x^3 + 9x^2 - 9x + 14$
 d) $7x^4 - 9x^3 + 9x^2 - 9x + 8$