



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Algebra and Geometry

Class: 7

Date: 30.01.21

Duration: 40 min

Worksheet 05

Full Marks: 15

Algebraic Expressions

1. In a two digit number, the units digit is x and tens digit is $(x+3)$. What is the sum of the digits in the number?

- (a) $11x+3$
- (b) $2x+3$
- (c) $3+x$
- (d) $11x+30$

2. The constant term in the expression $1 + x^2 + x$ is

- (a) 1
- (b) x
- (c) x^2
- (d) None of these

3. The length and breadth of a rectangular plot are l and b . Two rectangular paths each of width w run inside the plot one parallel to the length and the other parallel to the breadth. What is the total area of the paths?

- (a) $(l + w)(b + w) - lb$
- (b) $lb - (l - w)(b - w)$
- (c) $(l + b - w)w$
- (d) $lb - (l - 2w)(b - 2w)$

4. Get the algebraic expressions for subtraction of z from y .

- (a) $y \times z$
- (b) $y - z$
- (c) $y + z$
- (d) y/z

5 Simplify combining like terms: $3a - 2b - ab - (a - b + ab) + 3ab + b - a$

- (a) $a - ab$
- (b) $a + ab$
- (c) $a + b$
- (d) None of these

6. Write an expression : Raju s father s age is 5 years more than 3 times Raju s age. If Raju s age is x years, then father's age is

- (a) $3x - 5$
- (b) $3x + 7$
- (c) $5 - 3x$
- (d) $3x + 5$

7. An expression which contains two unlike terms is called _____.

- (a) binomial
- (b) monomial
- (c) trinomial
- (d) None of these

8. What are the coefficients of y in the expression $yz^2 + 5$?

- (a) z
- (b) z^2
- (c) 1
- (d) 5

9. A and B are polynomials and each is the additive inverse of the other. What does it mean?

- (a) $A = B$
- (b) $A+B$ is zero
- (c) $A-B$ is zero
- (d) $A-B = B-A$

10. A _____ can take various values.

- (a) variable
- (b) expression
- (c) term
- (d) None of these

11. What are the coefficients of y in the expression $4x - 3y$?

- (a) -4
- (b) -3
- (c) 3
- (d) 4

12. What is the difference between $3a + 2b$ and $-2a - 5b$?

- (a) $5a+7b$
- (b) $-5a-7b$
- (c) $5a-7b$
- (d) $a-3b$

13. The sum of $mn + 5 - 2$ and $mn+3$ is

- (a) $2mn + 6$
- (b) $mn + 6$
- (c) $2mn - 6$
- (d) $mn - 6$

14. Simplify these expressions and find their values, if $x = 3$, $a = -1$, $b = -2$.

$$3x - 5a - x^2 + 9b$$

- (a) -13
- (b) 15
- (c) 13
- (d) None of these

15. Find the value of $x + 4$ for $x = 2$.

- (a) 6
- (b) 8
- (c) 4
- (d) None of these