

Basic Algebra Fundamentals

Mathematics · Practice Test · 25 Questions

1. In the algebraic expression $5x + 3$, what is the term '5' called?

- A) Variable
- B) Coefficient
- C) Constant
- D) Exponent

2. Which of the following represents 'a number x increased by 7'?

- A) $x - 7$
- B) $7x$
- C) $x + 7$
- D) $x / 7$

3. What is the value of 'x' if $x + 5 = 12$?

- A) 7
- B) 17
- C) 60
- D) 2

4. Which algebraic expression represents 'the product of 4 and y'?

- A) $4 + y$
- B) $4 - y$
- C) $y / 4$
- D) $4y$

5. In the expression $2a - 4$, what is the value of the constant?

- A) 2
- B) a
- C) -4
- D) 4

6. If $3x = 15$, what is the value of x?

- A) 5
- B) 12
- C) 45
- D) 3

7. What is the result when evaluating $2x + 5$ if $x = 3$?

- A) 10
- B) 11
- C) 13
- D) 16

8. Which of the following is an example of an algebraic equation?

- A) $3x + 2$
- B) $5y - 1 = 10$
- C) $2a + 4b$
- D) $x + 7$

9. What is the inverse operation needed to solve $x - 8 = 10$?

- A) Addition
- B) Subtraction
- C) Multiplication
- D) Division

10. If $p = 4$, what is the value of $3p + 2$?

- A) 9
- B) 12
- C) 14
- D) 24

11. Which term describes a letter used to represent an unknown number?

- A) Constant
- B) Coefficient
- C) Variable
- D) Operator

12. What is the value of y in the equation $y / 2 = 6$?

- A) 3
- B) 4
- C) 8
- D) 12

13. Simplify the expression $2x + 3x$.

- A) $5x$
- B) $6x$
- C) $5x^2$
- D) x

14. What is the value of 'a' if $2a + 1 = 9$?

- A) 3
- B) 4
- C) 5
- D) 8

15. In the expression $7b$, what does the letter 'b' represent?

- A) Coefficient
- B) Constant
- C) Variable
- D) Exponent

16. Which expression represents 'half of a number x'?

- A) $x + 2$
- B) $x - 2$
- C) $2x$
- D) $x / 2$

17. Evaluate $10 - x$ when $x = 4$.

- A) 14
- B) 6
- C) 40
- D) 2.5

18. What is the result of $5m$ if $m = 0$?

- A) 5
- B) 1
- C) 0
- D) 50

19. Solve for x: $x + 15 = 20$.

- A) 5
- B) 35
- C) 1.33
- D) 300

20. Which mathematical operation is implied in the term ' $8y$ '?

- A) Addition
- B) Subtraction
- C) Multiplication
- D) Division

21. If $x = 2$ and $y = 3$, what is the value of $x + y$?

- A) 5
- B) 6
- C) 23
- D) 1

22. Identify the coefficient in the expression $9k - 2$.

- A) 9
- B) k
- C) -2
- D) 2

23. Solve $4x = 20$.

- A) 80
- B) 16
- C) 5
- D) 24

24. Which expression means 'the difference between 10 and m '?

- A) $10 + m$
- B) $10m$
- C) $10 / m$
- D) $10 - m$

25. What is the value of $2x^2$ when $x = 3$?

- A) 12
- B) 18
- C) 36
- D) 6