

Basic Algebra Fundamentals

Basic Algebra · Answer Key · 12 Questions

1. In the algebraic expression $5x + 3$, what term is used to describe the letter x ?

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

2. What is the simplified form of the algebraic expression $4a + 3b + 2a - b$?

- A) $6a + 2b$**
- B) $6a + 4b$
- C) $8a + 2b$
- D) $5a + 2b$

3. What value of y makes the equation $y + 14 = 31$ true?

- A) 15
- B) 16
- C) 17**
- D) 45

4. Which mathematical operation is the inverse (opposite) of multiplication when solving an equation?

- A) Addition
- B) Subtraction
- C) Division**
- D) Exponentiation

5. What is the value of the expression $3m - 4$ when $m = 5$?

- A) 11**
- B) 15
- C) 7
- D) 19

6. In the algebraic term $7k$, what is the number 7 called?

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

7. According to the distributive property, which expression is equivalent to $4(x + 5)$?

- A) $4x + 5$
- B) $4x + 20$**
- C) $x + 20$
- D) $20x$

8. What is the solution to the equation $2x + 5 = 15$?

- A) $x = 5$**
- B) $x = 10$
- C) $x = 7.5$
- D) $x = 20$

9. In the algebraic expression $2p + 9$, which value is a constant?

- A) 2
- B) p
- C) 9**
- D) $2p$

10. Which algebraic expression correctly represents the phrase '8 less than a number n '?

- A) $8 - n$
- B) $n - 8$**
- C) $8 / n$
- D) $n + 8$

11. What is the value of k if $k / 6 = 7$?

- A) 13
- B) 42**
- C) 1.16
- D) 36

12. On a standard Cartesian coordinate plane, what are the coordinates of the origin?

- A) (1, 1)
- B) (0, 1)
- C) (1, 0)
- D) (0, 0)**