

Middle School Basic Algebra Mastery

Basic Algebra · Answer Key · 20 Questions

1. What is the value of the expression $3x + 5$ when $x = 4$?

- A) 17
- B) 27**
- C) 32
- D) 12

2. Which of the following is an example of a variable?

- A) 5
- B) x**
- C) +
- D) 10

3. Solve for n in the equation $n - 7 = 15$.

- A) 8
- B) 22**
- C) 105
- D) 5

4. If $2y = 18$, what is the value of y ?

- A) 9**
- B) 16
- C) 20
- D) 36

5. What is the coefficient of the term $6m$ in the expression $6m - 3$?

- A) m
- B) $6m$
- C) -3
- D) 6**

6. Simplify the expression $4a + 3a$.

- A) $12a$
- B) $7a^2$
- C) $7a$**
- D) a

7. In the equation $3 + p = 10$, what is the constant term?

- A) p
- B) 3**
- C) 10
- D) 7

8. What operation is represented by the exponent in x^2 ?

- A) Addition
- B) Subtraction
- C) Multiplication
- D) Raising to a power**

9. Solve for b in the equation $b/5 = 4$.

- A) 20**
- B) 9
- C) 1
- D) 25

10. Which of the following is an inequality?

- A) $x + 2 = 5$
- B) $3y > 9$**
- C) $4a - 1$
- D) $10 = 10$

11. What is the inverse operation of addition?

- A) Multiplication
- B) Division
- C) Subtraction**
- D) Squaring

12. Simplify the expression $5(x + 2)$.

- A) $5x + 2$
- B) $7x$
- C) $5x + 10$**
- D) $x + 10$

13. If $a = 3$ and $c = 7$, what is the value of $a + c$?

- A) 21
- B) 10**
- C) 4
- D) 11

14. What does the 'equals' sign (=) represent in an equation?

- A) Greater than
- B) Less than
- C) Balance or equivalence**
- D) Difference

15. Identify the constant term in the algebraic expression $2k - 9 + 4m$.

- A) $2k$
- B) $4m$
- C) 2
- D) -9**

16. Solve for z in the equation $12 - z = 5$.

- A) 17
- B) 7**
- C) 60
- D) 5

17. What is the result of combining like terms in $8y - 3y$?

- A) $11y$
- B) $5y$**
- C) $24y$
- D) y

18. If a number is represented by ' n ', how would you write 'five less than a number' algebraically?

- A) $5n$
- B) $n + 5$
- C) $n - 5$**
- D) $5 - n$

19. What is the order of operations (PEMDAS/BODMAS) first step?

- A) Multiplication and Division
- B) Addition and Subtraction
- C) Parentheses/Brackets**
- D) Exponents/Orders

20. Solve for x in the equation $3x = 21$.

- A) 7**
- B) 18
- C) 63
- D) 24