

Middle School Algebra Fundamentals

Algebra · Answer Key · 15 Questions

1. Which of the following is an expression that represents 'five less than a number, n '?

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

2. If $x = 3$, what is the value of $2x + 7$?

- A) 10
- B) 13**
- C) 6
- D) 21

3. What is the coefficient of the term $7y$ in the expression $3x + 7y - 2$?

- A) 3
- B) x
- C) 7**
- D) y

4. Which equation correctly represents the statement 'The sum of a number, p , and 9 is equal to 23'?

- A) $p - 9 = 23$
- B) $9p = 23$
- C) $p + 9 = 23$**
- D) $23p = 9$

5. To solve the equation $4m = 20$ for m , what operation should be performed on both sides of the equation?

- A) Add 4
- B) Subtract 4
- C) Multiply by 4
- D) Divide by 4**

6. What is the value of y in the equation $y - 6 = 15$?

- A) 9
- B) 21**
- C) 15
- D) 6

7. In the expression $5(a + 2)$, what does the number 5 represent?

- A) A variable
- B) A constant
- C) A coefficient**
- D) An exponent

8. Which of the following is an example of a like term with $3x$?

- A) $3y$
- B) x
- C) $5x$**
- D) 3

9. If $a = -2$, what is the value of a^2 ?

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

10. What is the solution to the inequality $2k > 10$?

- A) $k < 5$
- B) $k > 5$**
- C) $k = 5$
- D) $k < 10$

11. Which of these is a perfect square trinomial?

- A) $x^2 + 4x + 5$
- B) $x^2 + 6x + 9$**
- C) $x^2 + 2x + 1$
- D) $x^2 + 8x + 10$

12. What is the least common multiple (LCM) of the denominators in the expression $\frac{1}{x} + \frac{1}{y}$?

- A) x
- B) y
- C) xy**
- D) $x + y$

13. If a rectangle has a length of L units and a width of W units, what is its perimeter?

- A) LW
- B) $L + W$
- C) $2L + 2W$
- D) $2(L + W)$**

14. What operation is being performed on 'n' in the expression $n/3$?

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

15. Which of the following represents a set of integers?

- A) $\{1.5, 2.7, 3.1\}$
- B) $\{1/2, 3/4, 5/6\}$
- C) $\{-3, -2, -1, 0, 1, 2, 3\}$**
- D) $\{10\%, 25\%, 50\%\}$