

Algebra 1 Worksheet:

Algebraic Expressions and Equations



Part 1: Vocabulary and Concepts (Multiple Choice)

1. What is a **variable**?

- A. A fixed number
- B. A letter that represents a number
- C. A math symbol
- D. An operation

Answer: _____

2. Which of the following is an **expression**?

- A. $x=3x = 3x=3$
- B. $5x+25x + 25x+2$
- C. $x>4x > 4x>4$
- D. $7=2x7 = 2x7=2x$

Answer: _____

3. What does an **equation** always include?

- A. A plus sign
- B. A variable
- C. An equal sign
- D. A number

Answer: _____

4. In the expression $4x+34x + 34x+3$, which number is the **coefficient**?

- A. 3
- B. x
- C. 4
- D. 7

Answer: _____

5. What is a **constant** in an algebraic expression?

- A. A changing number
- B. A variable
- C. A letter
- D. A number that doesn't change

Answer: _____

Part 2: Fill in the Blank

6. The part of the expression that includes a letter (like xxx) is called a _____.

7. An equation shows that two _____ are equal.

8. In the expression $2x+52x + 52x+5$, the number 5 is called a _____.

9. In the equation $x+3=7x + 3 = 7x+3=7$, the solution is _____.

10. A letter like xxx or yyy that stands for a number is called a _____.

 Part 3: Yes / No Questions

11. Does the expression $6x+26x + 26x+2$ contain an equal sign?

Answer: __Yes____No____

12. Can an equation be used to solve a math problem?

Answer: __Yes____No____

13. Is 7 a variable?

Answer: __Yes____No____

14. Is the equal sign used in expressions?

Answer: __Yes____No____

15. Are all equations also expressions?

Answer: __Yes____No____

Part 4: Identify or Match

16. Match each term to its definition:

- Variable → ____
- Coefficient → ____
- Constant → ____

- A. A number in front of a variable
- B. A number that doesn't change
- C. A symbol that represents a number

17. Identify the constant in this expression:

$$69y + 6$$

Answer: _____

18. Identify the variable in this expression:

$$5a - 2$$

Answer: _____

19. Identify the coefficient in this expression:

$$37x + 3$$

Answer: _____

20. What type of math sentence is this?

$$3x + 5 = 11 \quad 3x + 5 = 11 \quad 3x + 5 = 11$$

A. Expression

B. Equation

Answer: _____