

Name _____ **Elementary Algebra Quiz**

1. Evaluate each expression.

a) $-19 - 11$

b) $-10 - (-7)$

2. Evaluate each expression.

a) $-(-2)^2$

b) $(-2)^2$

3. Evaluate the expression.

$$[(3 - 2)^2 - (4 - 2)^2] \cdot 2^2 - 2 \cdot 2$$

4. Evaluate the expression for the given value of the variable.

$$x^2 - x - 1 \text{ for } x = -2$$

5. Evaluate each expression, if possible. If not possible, then explain why not.

a) $\frac{0}{3}$

b) $\frac{3}{0}$

6. Complete the statement using the given property:

a) **Commutative Property of Addition** $x + 3 =$

b) **Commutative Property of Multiplication** $5(x + 2) =$

c) **Associative Property of Addition** $(4 + 2) + 9 =$

d) **Distributive Property:** $8(x + 3) =$

7. Name the property.

a) $2 + (x + 1) = (x + 1) + 2$

b) $(x + y)a = a(x + y)$

c) $(y + x)2 = y \cdot 2 + x \cdot 2$

d) $(x + y) + 2 = x + (y + 2)$

8. **Combine Like Terms:** $2x - 7 - 4x - 23$

9. **Distribute and Combine Like Terms** $-(4y + 3 - 3x)$

10. Simplify: $-(x - 2) - 2(-5x + 7)$

11. Is $x = -2$ a solution of the equation $x + 7 = 9 + 2x$?

12. Solve the following equation: $5.71 = 7.98 - x$

13. Solve the following equation: $\frac{-2}{7}x = 15$

14. Solve the following equation: $-3x = \frac{4}{6}$

15. Solve the following equation: $4x + 11 - x = 2x + 6 - 3x$

16. Solve the following equation: $0.1x + 1.63 = 1.2 - 1.2x$

17. Solve the following equation: $-\frac{4}{3}x + 5 = \frac{3}{2}$

18. Solve the following equation: $2(x - 1) - 3(x + 1) = -(x + 1)$