Grade 6

Topic: Numerical Expressions and Factors

Instructions

Solve each question carefully using the correct order of operations for numerical expressions. List all the factors for the given numbers and identify whether they are prime or composite. Show your working where necessary and write your answers clearly in the spaces provided.

Part A: Evaluate the Expressions

Evaluate the following numerical expressions using the correct order of operations.

1. $5 + 3 \times 2 =$ ____
2. $(4 + 6) \div 2 =$ ____
3. $12 - 4 + 3 =$ ____
4. $9 \times (2 + 1) =$ ____

5. $(8 + 2) \times (3 - 1) =$ ____
6. $16 \div 4 + 5 =$ ____
7. $7 + (6 \times 2) - 3 =$ ____
8. $(10 - 4) \times (3 + 1) =$ ____

Part B: Find All the Factors

List all the factors of the following numbers.

9. 18: _____
10. 24: _____
11. 30: _____
12. 36: _____
13. 16: _____

Part C: Identify Prime or Composite

Write **Prime** or **Composite** for each number.

14. 7: ____
15. 12: ____
16. 29: ____
17. 20: ____
18. 31: ____
19. 15: ____

Part D: Challenge Questions

20. Write a numerical expression for: "Add 4 to the product of 3 and 5" ____

21. Write a numerical expression for: "Divide the sum of 10 and 2 by 3" ____

22. Find the common factors of 12 and 16 ____

23. Find the common factors of 18 and 30 ____

24. What is the greatest common factor (GCF) of 18 and 24? ____

25. What is the greatest common factor (GCF) of 36 and 48? ____