

Patterns: Worksheet for Grade 4 : Difficulty Level : Advanced























Name: _____

Date: _____

Section A: Complex Number Patterns

1. Find the next two numbers in the sequence:
 - a) 5, 15, 30, 50, 75, ____, ____
 - b) 2, 5, 11, 23, 47, ____, ____
 - c) 120, 100, 80, 65, 50, ____, ____
 - d) 1, 4, 9, 16, 25, 36, ____, ____
 2. Identify the rule and fill in the missing numbers:
 - a) 3, 8, 18, 33, ____, ____
 - b) 7, 14, 28, 56, ____, ____
 - c) 2, 10, 30, 68, ____, ____
 - d) 50, 45, 39, 32, ____, ____
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Section B: Shape Patterns with Rules

3. Draw or identify the next shapes:
 - a) , , , , , , ____, ____
 - b) , , , , , ____, ____
 4. Determine the missing shape based on the rule:
 - a) , , , , , , ____
 - b) , , , , , ____
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Section C: Word and Letter Patterns

5. Complete the word pattern:
 - a) CAT, COT, CUT, ____, ____
 - b) AB, CD, EF, GH, ____, ____
6. Identify the pattern and continue it:
 - a) APPLE, APRIL, APPLY, APRICOT, ____, ____
 - b) BAT, HAT, MAT, NAT, ____, ____

Section D: Mixed Challenge Problems

7. **Fill in the blanks with numbers or letters to complete the pattern:**

a) A1, B2, C3, D4, ____, ____





b) 2A, 4B, 8C, 16D, ____, ____

8. **Create a complex pattern (number or shape) and explain the rule:**

Pattern: _____

Explanation: _____

Answer Key (for teachers):

- **Section A:** 1) a) 105, 140 b) 95, 191 c) 40, 30 d) 49, 64
- **Section B:** 3) a) ,  b) , 
- **Section C:** 5) a) COT, CUR b) IJ, KL
- **Section D:** Answers will vary for created patterns.

— BE CHAMPION —