

Pattern Puzzles – Pack 52

Puzzle 1. What comes next in the sequence?

2	15	9	11	6	21	13	13	10	27	17	15	?
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A) 16	B) 14	C) 33	D) 15
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Puzzle 2. What number replaces the question mark in the grid?

4	7	6
6	16	14
11	5	?

A) 17	B) 11	C) 16	D) 8
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Puzzle 3. What number replaces the question mark in the grid?

1	1	23
1	5	30
12	14	?

A) 27	B) 38	C) 10	D) 39
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Puzzle 4. What comes next in the sequence?

5	3	6	16	27	51	96	176	?
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A) 327	B) 325	C) 323	D) 303
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Puzzle 5. What number replaces the question mark in the grid?

7	5	13
9	6	13
12	25	?

A) 10	B) 22	C) 19	D) 20
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Puzzle 6. What comes next in the sequence?

5	5	5	16	27	49	93	170	?
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- A) 314 B) 312 C) 338 D) 313

Puzzle 7. What comes next in the sequence?

6	2	6	17	28	54	102	187	?
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- A) 349 B) 391 C) 343 D) 346

Puzzle 8. What number replaces the question mark in the grid?

1	1	7
2	1	13
5	8	?

- A) 24 B) 23 C) 3 D) 16

Puzzle 9. What comes next in the sequence?

9	15	2	7	15	17	4	10	21	19	6	13	?
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- A) 28 B) 27 C) 23 D) 21

Puzzle 10. What comes next in the sequence?

2	4	8	5	5	6	11	11	8	8	14	17	?
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- A) 10 B) 15 C) 12 D) 11

Answer Key

1. **B) 14**

Four interleaved arithmetic series (period 4):

6. **D) 313**

Rule: $a(n) = a(n-1)+a(n-2)+a(n-3)+1$.

2. **C) 16**

Column sums are triangular numbers: 21, 28, 36.

7. **D) 346**

Rule: $a(n) = a(n-1)+a(n-2)+a(n-3)+3$.

3. **B) 38**

Row sums are perfect squares: 25, 36, 64.

8. **B) 23**

Row sums are perfect squares: 9, 16, 36.

4. **B) 325**

Rule: $a(n) = a(n-1)+a(n-2)+a(n-3)+2$.

9. **B) 27**

Four interleaved arithmetic series (period 4):

5. **C) 19**

Column sums are triangular numbers: 28, 36, 45.

10. **D) 11**

Four interleaved arithmetic series (period 4):