

Pattern Puzzles – Pack 26

Puzzle 1. What comes next in the sequence?

5	4	4	15	25	46	88	161	?
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- A) 295
 B) 312
 C) 297
 D) 299

Puzzle 2. What comes next in the sequence?

12	56	190	492	1064	2032	3546	5780	?
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- A) 8932
 B) 8956
 C) 8908
 D) 5780

Puzzle 3. What comes next in the sequence?

3	10	7	15	8	16	15	17	13	22	23	19	?
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- A) 18
 B) 28
 C) 13
 D) 19

Puzzle 4. What comes next in the sequence?

9	53	187	489	1061	2029	3543	5777	?
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- A) 5777
 B) 8905
 C) 8953
 D) 8929

Puzzle 5. What comes next in the sequence?

2	6	5	15	28	50	95	175	?
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- A) 320
 B) 324
 C) 331
 D) 322

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Puzzle 6. What comes next in the sequence?

14	8	13	15	22	10	17	23	30	12	21	31	?
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- A) 39 B) 38 C) 32 D) 14

Puzzle 7. What comes next in the sequence?

8	47	174	467	1028	1983	3482	5699	?
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- A) 5699 B) 8832 C) 8808 D) 8856

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

1	2	4
4	6	10
5	7	?

- A) 3 B) 1 C) 8 D) 7

Puzzle 9. What comes next in the sequence?

3	2	3	8	10	10	10	12	17	18	17	16	?
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- A) 22 B) 26 C) 24 D) 25

Puzzle 10. What number replaces the question mark in the grid?

2	1	7
7	1	18
6	19	?

- A) 1 B) 6 C) 4 D) 3

Answer Key

1. **C) 297**

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

6. **B) 38**

Four interleaved arithmetic series (period 4):

2. **A) 8932**

4th differences are all 24 (quartic sequence).

7. **B) 8832**

4th differences are all 24 (quartic sequence).

3. **A) 18**

Four interleaved arithmetic series (period 4):

8. **D) 7**

Column sums are triangular numbers: 10, 15, 21.

4. **D) 8929**

4th differences are all 24 (quartic sequence).

9. **C) 24**

Four interleaved arithmetic series (period 4):

5. **D) 322**

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

10. **D) 3**

Column sums are triangular numbers: 15, 21, 28.