

Pattern Puzzles – Pack 42

Puzzle 1. What comes next in the sequence?

13	14	15	14	19	22	19	17	25	30	23	20	?
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- A) 33
 B) 38
 C) 32
 D) 31

Puzzle 2. What number replaces the question mark in the grid?

1	2	2
5	17	20
9	2	?

- A) 6
 B) 7
 C) 2
 D) 10

Puzzle 3. What comes next in the sequence?

5	2	2	10	15	28	54	98	?
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- A) 181
 B) 182
 C) 180
 D) 163

Puzzle 4. What comes next in the sequence?

3	3	2	9	15	27	52	95	?
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- A) 175
 B) 208
 C) 174
 D) 176

Puzzle 5. What comes next in the sequence?

10	3	9	7	18	6	15	13	26	9	21	19	?
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- A) 34
 B) 35
 C) 12
 D) 29

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Puzzle 6. What comes next in the sequence?

7	32	119	334	767	1532	2767	4634	?
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- A) 7319
 B) 7295
 C) 4634
 D) 7343

Puzzle 7. What comes next in the sequence?

10	4	9	12	14	6	14	19	18	8	19	26	?
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- A) 20
 B) 10
 C) 23
 D) 22

Puzzle 8. What comes next in the sequence?

13	11	3	8	19	17	11	14	25	23	19	20	?
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- A) 35
 B) 31
 C) 29
 D) 32

Puzzle 9. What comes next in the sequence?

15	14	2	13	17	17	4	21	19	20	6	29	?
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- A) 22
 B) 23
 C) 26
 D) 21

Puzzle 10. What comes next in the sequence?

10	12	8	4	16	20	15	9	22	28	22	14	?
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- A) 30
 B) 28
 C) 29
 D) 36

Answer Key

1. **D) 31**

Four interleaved arithmetic series (period 4):

6. **A) 7319**

4th differences are all 24 (quartic sequence).

2. **A) 6**

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

7. **D) 22**

Four interleaved arithmetic series (period 4):

3. **A) 181**

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

8. **B) 31**

Four interleaved arithmetic series (period 4):

4. **A) 175**

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

9. **D) 21**

Four interleaved arithmetic series (period 4):

5. **A) 34**

Four interleaved arithmetic series (period 4):

10. **B) 28**

Four interleaved arithmetic series (period 4):