

Pattern Puzzles – Pack 60

Puzzle 1. What comes next in the sequence?

6	6	2	16	26	46	90	164	?
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- A) 304
 B) 267
 C) 300
 D) 302

Puzzle 2. What comes next in the sequence?

12	52	172	444	964	1852	3252	5332	?
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- A) 8260
 B) 8284
 C) 8308
 D) 5332

Puzzle 3. What comes next in the sequence?

5	14	10	8	9	19	14	12	13	24	18	16	?
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- A) 29
 B) 19
 C) 18
 D) 17

Puzzle 4. What number replaces the question mark in the grid?

3	5	6
4	8	12
3	2	?

- A) 7
 B) 3
 C) 6
 D) 4

Puzzle 5. What comes next in the sequence?

2	15	4	5	7	21	10	11	12	27	16	17	?
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- A) 15
 B) 33
 C) 17
 D) 18

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Puzzle 6. What comes next in the sequence?

2	4	2	9	16	28	54	99	?
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- A) 212 B) 182 C) 181 D) 183

Puzzle 7. What number replaces the question mark in the grid?

2	3	12
13	11	18
6	14	?

- A) 7 B) 11 C) 6 D) 9

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

2	5	7
1	11	10
12	5	?

- A) 12 B) 11 C) 4 D) 13

Puzzle 9. What comes next in the sequence?

11	47	161	425	935	1811	3197	5261	?
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- A) 8171 B) 8195 C) 5261 D) 8219

Puzzle 10. What comes next in the sequence?

2	2	2	8	14	26	50	92	?
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- A) 193 B) 172 C) 168 D) 170

Answer Key

1. **D) 302**

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

6. **B) 182**

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

2. **B) 8284**

4th differences are all 24 (quartic sequence).

7. **C) 6**

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

3. **D) 17**

Four interleaved arithmetic series (period 4):

8. **B) 11**

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

4. **B) 3**

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

9. **B) 8195**

4th differences are all 24 (quartic sequence).

5. **C) 17**

Four interleaved arithmetic series (period 4):

10. **D) 170**

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