

Pattern Puzzles – Pack 50

Puzzle 1. What number replaces the question mark in the grid?

3	2	2
1	13	15
11	6	?

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

Puzzle 2. What comes next in the sequence?

4	4	6	16	28	52	98	180	?
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- A) 334
 B) 379
 C) 330
 D) 332

Puzzle 3. What number replaces the question mark in the grid?

4	2	6
6	14	1
11	12	?

- A) 30
 B) 21
 C) 27
 D) 29

Puzzle 4. What comes next in the sequence?

11	2	12	9	19	9	14	13	27	16	16	17	?
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- A) 23
 B) 34
 C) 36
 D) 35

Puzzle 5. What comes next in the sequence?

9	13	4	4	11	15	6	6	13	17	8	8	?
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- A) 16
 B) 15
 C) 19
 D) 14

Pattern Puzzles – Pack 50

Puzzle 6. What number replaces the question mark in the grid?

2	2	5
1	3	12
3	1	?

- A) 53
 B) 61
 C) 12
 D) 60

Puzzle 7. What comes next in the sequence?

8	53	190	497	1076	2053	3578	5825	?
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- A) 5825
 B) 8992
 C) 9016
 D) 8968

Puzzle 8. What comes next in the sequence?

5	14	11	6	13	18	17	12	21	22	23	18	?
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- A) 25
 B) 30
 C) 29
 D) 26

Puzzle 9. What number replaces the question mark in the grid?

2	1	6
7	9	20
7	5	?

- A) 24
 B) 38
 C) 10
 D) 37

Puzzle 10. What comes next in the sequence?

12	13	13	4	16	21	16	9	20	29	19	14	?
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- A) 28
 B) 37
 C) 25
 D) 24

Answer Key

1. **D) 11**

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

6. **D) 60**

Row sums are perfect squares: 9, 16, 64.

2. **D) 332**

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

7. **B) 8992**

4th differences are all 24 (quartic sequence).

3. **D) 29**

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

8. **C) 29**

Four interleaved arithmetic series (period 4):

4. **D) 35**

Four interleaved arithmetic series (period 4):

9. **D) 37**

Row sums are perfect squares: 9, 36, 49.

5. **B) 15**

Four interleaved arithmetic series (period 4):

10. **D) 24**

Four interleaved arithmetic series (period 4):