

Pattern Puzzles – Pack 18

Puzzle 1. What comes next in the sequence?

0	17	94	297	716	1465	2682	?
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- A) 4529 B) 4553 C) 4505 D) 3899

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

3	7	9
2	2	21
8	8	?

- A) 14 B) 9 C) 15 D) 21

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

7	5	2
3	3	12
6	7	?

- A) 13 B) 9 C) 5 D) 8

Puzzle 4. What comes next in the sequence?

7	35	137	385	875	1727	3085	?
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- A) 4443 B) 5117 C) 5093 D) 5141

Puzzle 5. What comes next in the sequence?

4	24	104	310	732	1484	2704	?
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- A) 4578 B) 4530 C) 3924 D) 4554

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

4	7	1
4	8	3
8	6	?

- A) 7
 B) 1
 C) 4
 D) 3

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

5	5	2
2	3	9
3	6	?

- A) 9
 B) 7
 C) 5
 D) 6

Puzzle 8. What comes next in the sequence?

6	29	114	327	758	1521	2754	?
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- A) 4619
 B) 4643
 C) 3987
 D) 4595

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

8	8	2
4	8	11
2	5	?

- A) 20
 B) 26
 C) 21
 D) 16

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

7	8	4
2	4	17
6	4	?

- A) 13
 B) 16
 C) 21
 D) 17

Answer Key

1. **A) 4529**

4th diffs: 24 (constant – quartic sequence).

6. **C) 4**

Row sums form arithmetic sequence: 12, 15, 18.

2. **C) 15**

Row sums form arithmetic sequence: 19, 25, 31.

7. **B) 7**

Row sums form arithmetic sequence: 12, 14, 16.

3. **B) 9**

Row sums form arithmetic sequence: 14, 18, 22.

8. **A) 4619**

4th diffs: 24 (constant – quartic sequence).

4. **B) 5117**

4th diffs: 24 (constant – quartic sequence).

9. **C) 21**

Row sums form arithmetic sequence: 18, 23, 28.

5. **D) 4554**

4th diffs: 24 (constant – quartic sequence).

10. **D) 17**

Row sums form arithmetic sequence: 19, 23, 27.