

Pattern Puzzles – Pack 43

Puzzle 1. What comes next in the sequence?

5	29	125	365	845	1685	3029	?
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- A) 4373
 B) 5045
 C) 5069
 D) 5021

Puzzle 2. What comes next in the sequence?

5	31	121	341	781	1555	2801	?
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- A) 4705
 B) 4681
 C) 4047
 D) 4657

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

6	2	5
2	8	7
6	4	?

- A) 11
 B) 7
 C) 10
 D) 15

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

8	2	2
4	2	8
7	2	?

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

Puzzle 5. What comes next in the sequence?

4	32	134	382	872	1724	3082	?
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- A) 5114
 B) 4440
 C) 5090
 D) 5138

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

8	5	9
8	8	10
2	3	?

- A) 21
 B) 25
 C) 24
 D) 29

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

3	6	14
2	6	21
2	3	?

- A) 24
 B) 30
 C) 29
 D) 36

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

2	3	11
5	7	7
8	5	?

- A) 9
 B) 6
 C) 8
 D) 12

Puzzle 9. What comes next in the sequence?

8	35	128	353	800	1583	2840	?
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- A) 4709
 B) 4757
 C) 4097
 D) 4733

Puzzle 10. What comes next in the sequence?

1	13	73	241	601	1261	2353	?
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- A) 4033
 B) 4009
 C) 3445
 D) 4057

Answer Key

1. **B) 5045**
4th diffs: 24 (constant – quartic sequence).
2. **B) 4681**
4th diffs: 24 (constant – quartic sequence).
3. **A) 11**
Row sums form arithmetic sequence: 13, 17, 21.
4. **D) 7**
Row sums form arithmetic sequence: 12, 14, 16.
5. **A) 5114**
4th diffs: 24 (constant – quartic sequence).
6. **B) 25**
Row sums form arithmetic sequence: 22, 26, 30.
7. **B) 30**
Row sums form arithmetic sequence: 23, 29, 35.
8. **A) 9**
Row sums form arithmetic sequence: 16, 19, 22.
9. **D) 4733**
4th diffs: 24 (constant – quartic sequence).
10. **A) 4033**
4th diffs: 24 (constant – quartic sequence).