

## Pattern Puzzles – Pack 45

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

3	7	4
4	6	6
7	8	?

- A) 5     
  B) 3     
  C) 2     
  D) 1

**Puzzle 2.** What comes next in the sequence?

6	25	104	309	730	1481	2700	?
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- A) 4525     
  B) 4573     
  C) 4549     
  D) 3919

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

2	3	13
5	6	9
6	6	?

- A) 12     
  B) 9     
  C) 8     
  D) 10

**Puzzle 4.** What comes next in the sequence?

2	21	94	281	666	1357	2486	?
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- A) 3615     
  B) 4233     
  C) 4209     
  D) 4185

**Puzzle 5.** What number replaces the question mark in the grid?

5	5	10
2	6	14
3	7	?

- A) 13     
  B) 14     
  C) 16     
  D) 12

### Pattern Puzzles – Pack 45

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

4	8	1
6	2	10
8	4	?

- A) 6
  B) 10
  C) 11
  D) 16

**Puzzle 7.** What comes next in the sequence?

6	25	96	279	658	1341	2460	?
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- A) 4195
  B) 4147
  C) 4171
  D) 3579

**Puzzle 8.** What comes next in the sequence?

7	41	151	409	911	1777	3151	?
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- A) 4525
  B) 5201
  C) 5177
  D) 5225

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

2	5	7
7	6	3
4	5	?

- A) 8
  B) 7
  C) 9
  D) 11

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

2	8	8
4	4	15
5	3	?

- A) 15
  B) 20
  C) 25
  D) 19

## Answer Key

1. **B) 3**

Row sums form arithmetic sequence: 14, 16, 18.

6. **C) 11**

Row sums form arithmetic sequence: 13, 18, 23.

2. **C) 4549**

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

7. **C) 4171**

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

3. **D) 10**

Row sums form arithmetic sequence: 18, 20, 22.

8. **B) 5201**

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

4. **C) 4209**

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

9. **C) 9**

Row sums form arithmetic sequence: 14, 16, 18.

5. **B) 14**

Row sums form arithmetic sequence: 20, 22, 24.

10. **B) 20**

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