

## Pattern Puzzles – Pack 7

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

3	8	2
7	6	6
8	6	?

- A) 5     
  B) 11     
  C) 17     
  D) 10

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

3	2	8
7	3	9
8	2	?

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

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

7	8	7
8	3	13
3	6	?

- A) 16     
  B) 17     
  C) 19     
  D) 15

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

6	3	8
3	3	15
7	4	?

- A) 13     
  B) 14     
  C) 18     
  D) 10

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

8	3	4
7	2	11
2	2	?

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

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

4	2	14
6	5	15
2	5	?

- A) 24     
  B) 25     
  C) 19     
  D) 31

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

4	7	5
6	8	5
3	8	?

- A) 14     
  B) 8     
  C) 10     
  D) 11

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

1	12	71	238	597	1256	2347	?
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- A) 3438     
  B) 4026     
  C) 4002     
  D) 4050

**Puzzle 9.** What comes next in the sequence?

6	27	108	315	738	1491	2712	?
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- A) 4539     
  B) 3933     
  C) 4587     
  D) 4563

**Puzzle 10.** What comes next in the sequence?

5	25	105	311	733	1485	2705	?
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- A) 4579     
  B) 4555     
  C) 4531     
  D) 3925

## Answer Key

1. **B) 11**

Row sums form arithmetic sequence: 13, 19, 25.

6. **B) 25**

Row sums form arithmetic sequence: 20, 26, 32.

2. **B) 15**

Row sums form arithmetic sequence: 13, 19, 25.

7. **D) 11**

Row sums form arithmetic sequence: 16, 19, 22.

3. **B) 17**

Row sums form arithmetic sequence: 22, 24, 26.

8. **B) 4026**

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

4. **B) 14**

Row sums form arithmetic sequence: 17, 21, 25.

9. **D) 4563**

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

5. **A) 21**

Row sums form arithmetic sequence: 15, 20, 25.

10. **B) 4555**

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