Pattern Puzzles — Pack 13

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

3	3	7
6	1	14
11	8	?

A) 15 B) 2 C) 23 D) 14

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

1	2	5
4	4	5
3	3	?

A) 7 B) 20 C) 15 D) 14

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

2	6	13
7	7	20
2	6	?

A) 46 B) 47 C) 60 D) 26

Puzzle 4. What comes next in the sequence?

5	3	4	9	9	27	13	81	22	?

A) 35 B) 244 C) 243 D) 225

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

1	4	8
1	6	14
10	5	?

A) 27 B) 19 C) 18 D) 6

Pattern Puzzles — Pack 13

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

2	1	5
2	2	9
3	5	?

A) 13 B) 18 C) 12 D) 5

Puzzle 7. What comes next in the sequence?

4	3	11	23	50	98	184	331	?

A) 763 B) 482 C) 498 D) 579

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

7	1	13
4	10	20
4	14	?

A) 37 B) 16 C) 36 D) 50

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

6	5	10
9	7	18
9	2	?

A) 57 B) 23 C) 43 D) 44

Puzzle 10. What comes next in the sequence?

2	4	4	8	6	16	10	32	16	?

A) 76 B) 65 C) 64 D) 26

Answer Key

1. **A) 15**
Row sums are Fibonacci numbers: F(7)=13, F(8)=21, F(9)=34.

2. **C) 15**
Row sums are Fibonacci numbers: F(6)=8, F(7)=13, F(8)=21.

3. **B) 47**
Row sums are Fibonacci numbers: F(8)=21, F(9)=34, F(10)=55.

4. **C) 243**
Odd positions: Fibonacci-like sequence starting 5, 4.

5. **B) 19**
Row sums are Fibonacci numbers: F(7)=13, F(8)=21, F(9)=34.

6. **A) 13**
Row sums are Fibonacci numbers: F(6)=8, F(7)=13, F(8)=21.

7. **D) 579**
Rule: $a(n) = a(n-1)+a(n-2)+n^2$.

8. **A) 37**
Row sums are Fibonacci numbers: F(8)=21, F(9)=34, F(10)=55.

9. **D) 44**
Row sums are Fibonacci numbers: F(8)=21, F(9)=34, F(10)=55.

10. **C) 64**
Odd positions: Fibonacci-like sequence starting 2, 4.