

### Pattern Puzzles – Pack 4

**Puzzle 1.** What comes next in the sequence?

6	20	42	72	110	156	?
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A) 218	B) 210	C) 232	D) 202
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**Puzzle 2.** What comes next in the sequence?

5	13	24	38	55	75	?
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A) 101	B) 98	C) 84	D) 96
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**Puzzle 3.** What number replaces the question mark in the grid?

4	8	16
1	3	9
4	12	?

A) 24	B) 31	C) 36	D) 15
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**Puzzle 4.** What comes next in the sequence?

7	14	18	25	29	36	40	?
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A) 44	B) 47	C) 51	D) 46
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**Puzzle 5.** What comes next in the sequence?

12	28	52	84	124	172	?
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A) 236	B) 220	C) 228	D) 273
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Puzzle 6. What comes next in the sequence?

125	216	343	512	729	?
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- A) 1000      B) 900      C) 1100      D) 1331

Puzzle 7. What comes next in the sequence?

4	14	30	52	80	114	?
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- A) 148      B) 159      C) 154      D) 160

Puzzle 8. What comes next in the sequence?

10	2	14	10	18	18	?
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- A) 23      B) 22      C) 21      D) 26

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

1	3	9
2	4	8
3	9	?

- A) 27      B) 12      C) 30      D) 22

Puzzle 10. What comes next in the sequence?

13	30	55	88	129	178	?
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- A) 243      B) 235      C) 227      D) 210

## Answer Key

- 1. B) 210**  
Sequence: 6, 20, 42, 72, 110, 156, ...
- 2. B) 98**  
Formula:  $3 \times n(n+1)/2 + 2n$ .
- 3. C) 36**  
Each row is a geometric sequence. Row 3 ratio:  $\times 3$ .
- 4. B) 47**  
Sequence: 7, 14, 18, 25, 29, 36, 40, ...
- 5. C) 228**  
Sequence: 12, 28, 52, 84, 124, 172, ...
- 6. A) 1000**  
Sequence: 125, 216, 343, 512, 729, ... Cube roots:  
5, 6, ...
- 7. C) 154**  
Sequence: 4, 14, 30, 52, 80, 114, ...
- 8. B) 22**  
Two interleaved series – odd: +4, even: +8.
- 9. A) 27**  
Each row is a geometric sequence. Row 3 ratio:  $\times 3$ .
- 10. B) 235**  
Sequence: 13, 30, 55, 88, 129, 178, ...