

Pattern Puzzles – Pack 27

Puzzle 1. What comes next in the sequence?

8	12	12	9	15	17	15	12	22	22	18	15	?
---	----	----	---	----	----	----	----	----	----	----	----	---

A) 27	B) 31	C) 30	D) 29
-------	-------	-------	-------

Puzzle 2. What comes next in the sequence?

14	3	3	5	18	6	10	10	22	9	17	15	?
----	---	---	---	----	---	----	----	----	---	----	----	---

A) 12	B) 25	C) 26	D) 27
-------	-------	-------	-------

Puzzle 3. What comes next in the sequence?

4	4	4	14	24	44	84	154	?
---	---	---	----	----	----	----	-----	---

A) 282	B) 286	C) 284	D) 245
--------	--------	--------	--------

Puzzle 4. What comes next in the sequence?

10	44	154	412	914	1780	3154	5204	?
----	----	-----	-----	-----	------	------	------	---

A) 8146	B) 8122	C) 8098	D) 5204
---------	---------	---------	---------

Puzzle 5. What comes next in the sequence?

10	44	146	382	842	1640	2914	4826	?
----	----	-----	-----	-----	------	------	------	---

A) 7586	B) 4826	C) 7538	D) 7562
---------	---------	---------	---------

Pattern Puzzles – Pack 27

Puzzle 6. What comes next in the sequence?

5	9	9	4	10	11	16	10	15	13	23	16	?
---	---	---	---	----	----	----	----	----	----	----	----	---

- A) 21
 B) 20
 C) 15
 D) 17

Puzzle 7. What comes next in the sequence?

3	6	6	18	33	60	114	210	?
---	---	---	----	----	----	-----	-----	---

- A) 387
 B) 384
 C) 390
 D) 350

Puzzle 8. What comes next in the sequence?

10	3	6	5	16	5	13	13	22	7	20	21	?
----	---	---	---	----	---	----	----	----	---	----	----	---

- A) 9
 B) 28
 C) 24
 D) 29

Puzzle 9. What comes next in the sequence?

4	2	2	11	18	34	66	121	?
---	---	---	----	----	----	----	-----	---

- A) 221
 B) 227
 C) 240
 D) 224

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

5	6	11
10	18	24
6	4	?

- A) 6
 B) 1
 C) 2
 D) 3

Answer Key

1. **D) 29**

Four interleaved arithmetic series (period 4):

6. **B) 20**

Four interleaved arithmetic series (period 4):

2. **C) 26**

Four interleaved arithmetic series (period 4):

7. **A) 387**

Rule: $a(n) = a(n-1)+a(n-2)+a(n-3)+3$.

3. **C) 284**

Rule: $a(n) = a(n-1)+a(n-2)+a(n-3)+2$.

8. **B) 28**

Four interleaved arithmetic series (period 4):

4. **B) 8122**

4th differences are all 24 (quartic sequence).

9. **D) 224**

Rule: $a(n) = a(n-1)+a(n-2)+a(n-3)+3$.

5. **D) 7562**

4th differences are all 24 (quartic sequence).

10. **B) 1**

Column sums are triangular numbers: 21, 28, 36.