

Pattern Puzzles – Pack 58

Puzzle 1. What comes next in the sequence?

4	3	2	9	14	25	48	87	?
---	---	---	---	----	----	----	----	---

A) 160	B) 112	C) 135	D) 158
--------	--------	--------	--------

Puzzle 2. What comes next in the sequence?

4	12	28	60	124	252	?
---	----	----	----	-----	-----	---

A) 504	B) 508	C) 252	D) 507
--------	--------	--------	--------

Puzzle 3. What comes next in the sequence?

5	10	8	9	12	11	13	14	?
---	----	---	---	----	----	----	----	---

A) 14	B) 16	C) 17	D) 15
-------	-------	-------	-------

Puzzle 4. What comes next in the sequence?

8	24	13	39	28	84	73	219	?
---	----	----	----	----	----	----	-----	---

A) 657	B) 219	C) 208	D) 658
--------	--------	--------	--------

Puzzle 5. What comes next in the sequence?

2	2	11	8	10	13	14	18	?
---	---	----	---	----	----	----	----	---

A) 16	B) 15	C) 20	D) 26
-------	-------	-------	-------

Pattern Puzzles – Pack 58

Puzzle 6. What comes next in the sequence?

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

- | | | | |
|-------|-------|-------|-------|
| A) 19 | B) 20 | C) 30 | D) 16 |
|-------|-------|-------|-------|

Puzzle 7. What comes next in the sequence?

14	4	10	18	9	15	22	14	?
----	---	----	----	---	----	----	----	---

- | | | | |
|-------|-------|-------|-------|
| A) 19 | B) 20 | C) 26 | D) 21 |
|-------|-------|-------|-------|

Puzzle 8. What comes next in the sequence?

12	26	54	102	176	282	426	?
----	----	----	-----	-----	-----	-----	---

- | | | | |
|--------|--------|--------|--------|
| A) 570 | B) 620 | C) 608 | D) 614 |
|--------|--------|--------|--------|

Puzzle 9. What comes next in the sequence?

6	17	42	87	158	261	402	?
---	----	----	----	-----	-----	-----	---

- | | | | |
|--------|--------|--------|--------|
| A) 587 | B) 593 | C) 543 | D) 581 |
|--------|--------|--------|--------|

Puzzle 10. What comes next in the sequence?

16	32	23	46	37	74	65	130	?
----	----	----	----	----	----	----	-----	---

- | | | | |
|--------|--------|--------|--------|
| A) 260 | B) 261 | C) 130 | D) 121 |
|--------|--------|--------|--------|

Answer Key

1. **A) 160**

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

2. **B) 508**

Rule: $a(n) = 2 \times a(n-1) + 4$.

3. **A) 14**

Three interleaved arithmetic series (period 3).

4. **A) 657**

Alternating: $\times 3$ (odd steps), -11 (even steps).

5. **B) 15**

Three interleaved arithmetic series (period 3).

6. **A) 19**

Three interleaved arithmetic series (period 3).

7. **B) 20**

Three interleaved arithmetic series (period 3).

8. **D) 614**

1st diffs: 14, 28, 48, 74, 106, 144.

9. **A) 587**

1st diffs: 11, 25, 45, 71, 103, 141.

10. **A) 260**

Alternating: $\times 2$ (odd steps), -9 (even steps).