

Pattern Puzzles – Pack 35

Puzzle 1. What comes next in the sequence?

4	3	1	8	12	21	41	74	?
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A) 115	B) 136	C) 140	D) 95
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Puzzle 2. What comes next in the sequence?

8	4	11	13	12	13	18	20	?
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A) 16	B) 23	C) 28	D) 15
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Puzzle 3. What comes next in the sequence?

10	21	44	85	150	245	376	?
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A) 549	B) 507	C) 555	D) 543
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Puzzle 4. What comes next in the sequence?

14	32	68	128	218	344	512	?
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A) 734	B) 728	C) 722	D) 680
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Puzzle 5. What comes next in the sequence?

12	15	24	51	132	375	1104	?
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A) 3291	B) 3294	C) 2562	D) 1833
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Puzzle 6. What comes next in the sequence?

1	2	4	7	13	24	44	81	?
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|--------|--------|--------|--------|
| A) 105 | B) 149 | C) 125 | D) 126 |
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Puzzle 7. What comes next in the sequence?

5	8	14	26	50	98	194	?
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|--------|--------|--------|--------|
| A) 343 | B) 386 | C) 389 | D) 290 |
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Puzzle 8. What comes next in the sequence?

15	45	37	111	103	309	301	903	?
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| A) 895 | B) 903 | C) 2710 | D) 2709 |
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Puzzle 9. What comes next in the sequence?

4	5	7	11	19	35	67	?
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|--------|-------|--------|--------|
| A) 104 | B) 99 | C) 132 | D) 131 |
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Puzzle 10. What comes next in the sequence?

11	33	22	66	55	165	154	462	?
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| A) 462 | B) 1387 | C) 451 | D) 1386 |
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Answer Key

1. **B) 136**

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

6. **B) 149**

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

2. **D) 15**

Three interleaved arithmetic series (period 3).

7. **B) 386**

Differences form geometric sequence ($\times 2$): 3, 6, 12, 24, 48, 96, 192.

3. **A) 549**

1st diffs: 11, 23, 41, 65, 95, 131.

8. **D) 2709**

Alternating: $\times 3$ (odd steps), -8 (even steps).

4. **B) 728**

1st diffs: 18, 36, 60, 90, 126, 168.

9. **D) 131**

Differences form geometric sequence ($\times 2$): 1, 2, 4, 8, 16, 32, 64.

5. **A) 3291**

Differences form geometric sequence ($\times 3$): 3, 9, 27, 81, 243, 729, 2187.

10. **D) 1386**

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