

Pattern Puzzles – Pack 25

Puzzle 1. What comes next in the sequence?

1	2	2	5	9	16	30	55	?
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A) 71	B) 85	C) 93	D) 101
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Puzzle 2. What comes next in the sequence?

11	8	11	16	12	16	21	16	?
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A) 22	B) 21	C) 20	D) 26
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Puzzle 3. What comes next in the sequence?

16	32	25	50	43	86	79	158	?
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A) 151	B) 317	C) 316	D) 158
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Puzzle 4. What comes next in the sequence?

11	12	14	18	26	42	74	?
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A) 139	B) 106	C) 148	D) 138
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Puzzle 5. What comes next in the sequence?

9	7	15	12	11	17	15	15	?
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A) 18	B) 21	C) 20	D) 19
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Puzzle 6. What comes next in the sequence?

1	4	5	10	19	34	63	116	?
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A) 179	B) 170	C) 213	D) 150
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Puzzle 7. What comes next in the sequence?

5	11	6	9	15	13	13	19	?
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A) 21	B) 23	C) 20	D) 17
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Puzzle 8. What comes next in the sequence?

7	17	39	79	143	237	367	?
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A) 497	B) 533	C) 545	D) 539
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Puzzle 9. What comes next in the sequence?

5	2	1	8	11	20	39	70	?
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A) 90	B) 133	C) 129	D) 109
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Puzzle 10. What comes next in the sequence?

8	25	58	113	196	313	470	?
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A) 679	B) 627	C) 667	D) 673
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Answer Key

1. **D) 101**

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

6. **C) 213**

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

2. **B) 21**

Three interleaved arithmetic series (period 3).

7. **C) 20**

Three interleaved arithmetic series (period 3).

3. **C) 316**

Alternating: $\times 2$ (odd steps), -7 (even steps).

8. **D) 539**

1st diffs: 10, 22, 40, 64, 94, 130.

4. **D) 138**

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

9. **C) 129**

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

5. **D) 19**

Three interleaved arithmetic series (period 3).

10. **D) 673**

1st diffs: 17, 33, 55, 83, 117, 157.