

Pattern Puzzles – Pack 55

Puzzle 1. What comes next in the sequence?

13	39	31	93	85	255	247	741	?
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A) 741	B) 2223	C) 2224	D) 733
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Puzzle 2. What comes next in the sequence?

9	15	6	11	20	13	13	25	?
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A) 21	B) 20	C) 15	D) 30
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Puzzle 3. What comes next in the sequence?

5	1	1	7	9	17	33	59	?
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A) 92	B) 112	C) 109	D) 76
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Puzzle 4. What comes next in the sequence?

13	24	47	88	153	248	379	?
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A) 546	B) 510	C) 558	D) 552
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Puzzle 5. What comes next in the sequence?

2	15	7	5	19	10	8	23	?
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A) 13	B) 27	C) 14	D) 11
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Puzzle 6. What comes next in the sequence?

13	26	14	28	16	32	20	40	?
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| A) 80 | B) 81 | C) 28 | D) 40 |
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Puzzle 7. What comes next in the sequence?

6	17	40	81	146	241	372	?
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| A) 551 | B) 545 | C) 503 | D) 539 |
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Puzzle 8. What comes next in the sequence?

9	11	11	16	18	19	23	25	?
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| A) 27 | B) 28 | C) 30 | D) 32 |
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Puzzle 9. What comes next in the sequence?

15	45	40	120	115	345	340	1020	?
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| A) 1015 | B) 3060 | C) 3061 | D) 1020 |
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Puzzle 10. What comes next in the sequence?

1	12	39	88	165	276	427	?
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| A) 618 | B) 624 | C) 630 | D) 578 |
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Answer Key

1. **B) 2223**
Alternating: $\times 3$ (odd steps), -8 (even steps).
2. **B) 20**
Three interleaved arithmetic series (period 3).
3. **C) 109**
Rule: $a(n) = a(n-1) + a(n-2) + a(n-3)$
(tribonacci).
4. **D) 552**
1st diffs: 11, 23, 41, 65, 95, 131.
5. **A) 13**
Three interleaved arithmetic series (period 3).
6. **A) 80**
Alternating: $\times 2$ (odd steps), -12 (even steps).
7. **B) 545**
1st diffs: 11, 23, 41, 65, 95, 131.
8. **A) 27**
Three interleaved arithmetic series (period 3).
9. **B) 3060**
Alternating: $\times 3$ (odd steps), -5 (even steps).
10. **B) 624**
1st diffs: 11, 27, 49, 77, 111, 151.