

Pattern Puzzles – Pack 46

Puzzle 1. What comes next in the sequence?

5	5	2	12	19	33	64	116	?
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|--------|--------|--------|--------|
| A) 149 | B) 192 | C) 213 | D) 180 |
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Puzzle 2. What comes next in the sequence?

10	20	13	26	19	38	31	62	?
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| A) 124 | B) 62 | C) 55 | D) 125 |
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Puzzle 3. What comes next in the sequence?

7	2	5	10	5	10	13	8	?
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| A) 15 | B) 11 | C) 12 | D) 16 |
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Puzzle 4. What comes next in the sequence?

12	36	27	81	72	216	207	621	?
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| A) 1863 | B) 621 | C) 612 | D) 1864 |
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Puzzle 5. What comes next in the sequence?

8	10	14	22	38	70	134	?
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| A) 235 | B) 198 | C) 262 | D) 264 |
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Puzzle 6. What comes next in the sequence?

13	39	28	84	73	219	208	624	?
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| A) 1873 | B) 624 | C) 1872 | D) 613 |
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Puzzle 7. What comes next in the sequence?

5	6	8	12	20	36	68	?
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| A) 132 | B) 100 | C) 133 | D) 146 |
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Puzzle 8. What comes next in the sequence?

6	20	48	96	170	276	420	?
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| A) 608 | B) 614 | C) 602 | D) 564 |
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Puzzle 9. What comes next in the sequence?

16	32	20	40	28	56	44	88	?
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|-------|--------|-------|--------|
| A) 88 | B) 176 | C) 76 | D) 177 |
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Puzzle 10. What comes next in the sequence?

11	5	9	17	7	14	23	9	?
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| A) 11 | B) 19 | C) 29 | D) 20 |
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Answer Key

1. **C) 213**

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

2. **A) 124**

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

3. **A) 15**

Three interleaved arithmetic series (period 3).

4. **A) 1863**

Alternating: $\times 3$ (odd steps), -9 (even steps).

5. **C) 262**

Differences form geometric sequence ($\times 2$): 2, 4, 8,
16, 32, 64, 128.

6. **C) 1872**

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

7. **A) 132**

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

8. **A) 608**

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

9. **B) 176**

Alternating: $\times 2$ (odd steps), -12 (even steps).

10. **B) 19**

Three interleaved arithmetic series (period 3).