

Pattern Puzzles – Pack 3

Puzzle 1. What comes next in the sequence?

6	15	13	14	22	21	22	29	?
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|-------|-------|-------|-------|
| A) 29 | B) 30 | C) 36 | D) 25 |
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Puzzle 2. What comes next in the sequence?

5	1	3	9	13	25	47	85	?
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| A) 110 | B) 132 | C) 157 | D) 143 |
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Puzzle 3. What comes next in the sequence?

11	7	15	18	13	23	25	19	?
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|-------|-------|-------|-------|
| A) 31 | B) 37 | C) 32 | D) 25 |
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Puzzle 4. What comes next in the sequence?

4	11	25	53	109	221	?
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| A) 445 | B) 221 | C) 444 | D) 442 |
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Puzzle 5. What comes next in the sequence?

14	9	6	22	17	13	30	25	?
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| A) 33 | B) 38 | C) 20 | D) 21 |
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Puzzle 6. What comes next in the sequence?

2	10	26	58	122	250	?
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|--------|--------|--------|--------|
| A) 506 | B) 505 | C) 250 | D) 500 |
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Puzzle 7. What comes next in the sequence?

15	16	19	28	55	136	379	?
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| A) 622 | B) 865 | C) 1109 | D) 1108 |
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Puzzle 8. What comes next in the sequence?

8	12	24	60	168	492	1464	?
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| A) 4380 | B) 4384 | C) 3408 | D) 2436 |
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Puzzle 9. What comes next in the sequence?

9	11	13	14	18	21	19	25	?
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| A) 24 | B) 32 | C) 30 | D) 29 |
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Puzzle 10. What comes next in the sequence?

18	36	30	60	54	108	102	204	?
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| A) 408 | B) 204 | C) 198 | D) 409 |
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Answer Key

1. **A) 29**

Three interleaved arithmetic series (period 3).

6. **A) 506**

Rule: $a(n) = 2 \times a(n-1) + 6$.

2. **C) 157**

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

7. **D) 1108**

Differences form geometric sequence ($\times 3$): 1, 3, 9,
27, 81, 243, 729.

3. **A) 31**

Three interleaved arithmetic series (period 3).

8. **A) 4380**

Differences form geometric sequence ($\times 3$): 4, 12,
36, 108, 324, 972, 2916.

4. **A) 445**

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

9. **D) 29**

Three interleaved arithmetic series (period 3).

5. **C) 20**

Three interleaved arithmetic series (period 3).

10. **A) 408**

Alternating: $\times 2$ (odd steps), -6 (even steps).