

Pattern Puzzles – Pack 48

Puzzle 1. What comes next in the sequence?

8	16	5	10	-1	-2	-13	-26	?
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|--------|--------|--------|--------|
| A) -52 | B) -49 | C) -51 | D) -50 |
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Puzzle 2. What comes next in the sequence?

8	5	15	11	7	19	14	9	?
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| A) 24 | B) 23 | C) 11 | D) 17 |
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Puzzle 3. What comes next in the sequence?

14	28	20	40	32	64	56	112	?
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|--------|--------|--------|--------|
| A) 112 | B) 104 | C) 224 | D) 225 |
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Puzzle 4. What comes next in the sequence?

8	12	5	16	16	10	24	20	?
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| A) 24 | B) 16 | C) 15 | D) 32 |
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Puzzle 5. What comes next in the sequence?

14	31	64	119	202	319	476	?
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| A) 685 | B) 673 | C) 633 | D) 679 |
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Puzzle 6. What comes next in the sequence?

15	16	18	22	30	46	78	?
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|--------|--------|--------|--------|
| A) 113 | B) 142 | C) 143 | D) 110 |
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Puzzle 7. What comes next in the sequence?

4	1	1	6	8	15	29	52	?
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| A) 81 | B) 96 | C) 104 | D) 67 |
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Puzzle 8. What comes next in the sequence?

5	11	15	8	17	18	11	23	?
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| A) 22 | B) 21 | C) 14 | D) 29 |
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Puzzle 9. What comes next in the sequence?

10	25	56	109	190	305	460	?
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|--------|--------|--------|--------|
| A) 655 | B) 667 | C) 661 | D) 615 |
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Puzzle 10. What comes next in the sequence?

4	4	11	12	8	15	20	12	?
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| A) 19 | B) 20 | C) 28 | D) 16 |
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Answer Key

1. **A) -52**

Alternating: $\times 2$ (odd steps), -11 (even steps).

2. **B) 23**

Three interleaved arithmetic series (period 3).

3. **C) 224**

Alternating: $\times 2$ (odd steps), -8 (even steps).

4. **C) 15**

Three interleaved arithmetic series (period 3).

5. **D) 679**

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

6. **B) 142**

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

7. **B) 96**

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

8. **B) 21**

Three interleaved arithmetic series (period 3).

9. **C) 661**

1st diffs: 15, 31, 53, 81, 115, 155.

10. **A) 19**

Three interleaved arithmetic series (period 3).