

Pattern Puzzles – Pack 18

Puzzle 1. What comes next in the sequence?

14	15	11	17	20	18	20	25	?
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|-------|-------|-------|-------|
| A) 25 | B) 30 | C) 23 | D) 26 |
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Puzzle 2. What comes next in the sequence?

7	15	37	79	147	247	385	?
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| A) 567 | B) 523 | C) 573 | D) 561 |
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Puzzle 3. What comes next in the sequence?

13	14	4	21	20	9	29	26	?
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| A) 14 | B) 37 | C) 32 | D) 15 |
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Puzzle 4. What comes next in the sequence?

6	14	3	9	20	8	12	26	?
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| A) 32 | B) 14 | C) 15 | D) 13 |
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Puzzle 5. What comes next in the sequence?

2	3	6	15	42	123	366	?
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| A) 1096 | B) 1095 | C) 609 | D) 852 |
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Puzzle 6. What comes next in the sequence?

5 12 26 54 110 222 ?

- A) 446 B) 444 C) 222 D) 445

Puzzle 7. What comes next in the sequence?

7 10 19 46 127 370 1099 ?

- A) 3286 B) 3289 C) 1828 D) 2557

Puzzle 8. What comes next in the sequence?

4 6 10 18 34 66 130 ?

- A) 258 B) 194 C) 260 D) 282

Puzzle 9. What comes next in the sequence?

9 3 14 15 11 16 21 19 ?

- A) 19 B) 27 C) 21 D) 18

Puzzle 10. What comes next in the sequence?

13 26 23 46 43 86 83 166 ?

- A) 332 B) 333 C) 163 D) 166

Answer Key

1. **A) 25**

Three interleaved arithmetic series (period 3).

6. **A) 446**

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

2. **A) 567**

1st diffs: 8, 22, 42, 68, 100, 138.

7. **A) 3286**

Differences form geometric sequence ($\times 3$): 3, 9, 27, 81, 243, 729, 2187.

3. **A) 14**

Three interleaved arithmetic series (period 3).

8. **A) 258**

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

4. **D) 13**

Three interleaved arithmetic series (period 3).

9. **D) 18**

Three interleaved arithmetic series (period 3).

5. **B) 1095**

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

10. **A) 332**

Alternating: $\times 2$ (odd steps), -3 (even steps).