

Pattern Puzzles – Pack 37

Puzzle 1. What comes next in the sequence?

| | | | | | | | | |
|---|---|---|----|---|----|----|----|---|
| 3 | 6 | 7 | 11 | 8 | 13 | 19 | 10 | ? |
|---|---|---|----|---|----|----|----|---|

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|-------|-------|-------|-------|
| A) 20 | B) 19 | C) 27 | D) 12 |
|-------|-------|-------|-------|

Puzzle 2. What comes next in the sequence?

| | | | | | | | | |
|----|---|----|----|----|----|----|----|---|
| 11 | 8 | 14 | 14 | 15 | 22 | 17 | 22 | ? |
|----|---|----|----|----|----|----|----|---|

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|-------|-------|-------|-------|
| A) 31 | B) 29 | C) 30 | D) 20 |
|-------|-------|-------|-------|

Puzzle 3. What comes next in the sequence?

| | | | | | | | | |
|----|----|---|----|----|----|----|----|---|
| 11 | 11 | 3 | 14 | 15 | 11 | 17 | 19 | ? |
|----|----|---|----|----|----|----|----|---|

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|-------|-------|-------|-------|
| A) 20 | B) 23 | C) 21 | D) 19 |
|-------|-------|-------|-------|

Puzzle 4. What comes next in the sequence?

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|---|---|---|---|---|----|----|----|---|
| 3 | 2 | 1 | 6 | 9 | 16 | 31 | 56 | ? |
|---|---|---|---|---|----|----|----|---|

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|--------|--------|-------|-------|
| A) 103 | B) 104 | C) 72 | D) 87 |
|--------|--------|-------|-------|

Puzzle 5. What comes next in the sequence?

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|----|----|----|----|----|----|----|-----|---|
| 17 | 34 | 24 | 48 | 38 | 76 | 66 | 132 | ? |
|----|----|----|----|----|----|----|-----|---|

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|--------|--------|--------|--------|
| A) 132 | B) 122 | C) 264 | D) 265 |
|--------|--------|--------|--------|

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Puzzle 6. What comes next in the sequence?

| | | | | | | | | |
|---|---|---|---|---|----|----|----|---|
| 2 | 1 | 1 | 4 | 6 | 11 | 21 | 38 | ? |
|---|---|---|---|---|----|----|----|---|

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|-------|-------|-------|-------|
| A) 59 | B) 70 | C) 79 | D) 49 |
|-------|-------|-------|-------|

Puzzle 7. What comes next in the sequence?

| | | | | | | | | |
|---|----|---|----|----|---|----|----|---|
| 9 | 14 | 2 | 15 | 19 | 6 | 21 | 24 | ? |
|---|----|---|----|----|---|----|----|---|

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|-------|-------|-------|-------|
| A) 27 | B) 11 | C) 10 | D) 29 |
|-------|-------|-------|-------|

Puzzle 8. What comes next in the sequence?

| | | | | | | | |
|---|----|----|----|-----|-----|-----|---|
| 4 | 12 | 32 | 70 | 132 | 224 | 352 | ? |
|---|----|----|----|-----|-----|-----|---|

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|--------|--------|--------|--------|
| A) 516 | B) 528 | C) 522 | D) 480 |
|--------|--------|--------|--------|

Puzzle 9. What comes next in the sequence?

| | | | | | | | |
|----|----|----|----|-----|-----|------|---|
| 13 | 16 | 25 | 52 | 133 | 376 | 1105 | ? |
|----|----|----|----|-----|-----|------|---|

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|---------|---------|---------|---------|
| A) 2563 | B) 3295 | C) 1834 | D) 3292 |
|---------|---------|---------|---------|

Puzzle 10. What comes next in the sequence?

| | | | | | | | | |
|----|----|----|----|----|----|----|-----|---|
| 19 | 38 | 27 | 54 | 43 | 86 | 75 | 150 | ? |
|----|----|----|----|----|----|----|-----|---|

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|--------|--------|--------|--------|
| A) 139 | B) 150 | C) 300 | D) 301 |
|--------|--------|--------|--------|

Answer Key

1. **B) 19**

Three interleaved arithmetic series (period 3).

2. **C) 30**

Three interleaved arithmetic series (period 3).

3. **D) 19**

Three interleaved arithmetic series (period 3).

4. **A) 103**

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

5. **C) 264**

Alternating: $\times 2$ (odd steps), -10 (even steps).

6. **B) 70**

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

7. **C) 10**

Three interleaved arithmetic series (period 3).

8. **C) 522**

1st diffs: 8, 20, 38, 62, 92, 128.

9. **D) 3292**

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

10. **C) 300**

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