

### Pattern Puzzles – Pack 7

**Puzzle 1.** What comes next in the sequence?



- A) 70    
  B) 82    
  C) 71    
  D) 78

**Puzzle 2.** What number replaces the question mark in the grid?

4	8	16
1	2	4
3	9	?

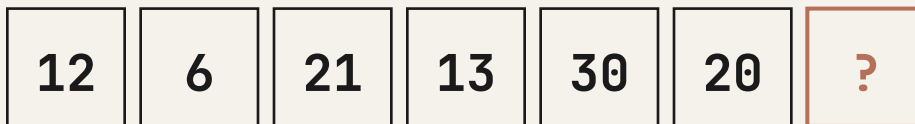
- A) 27    
  B) 12    
  C) 18    
  D) 31

**Puzzle 3.** What comes next in the sequence?



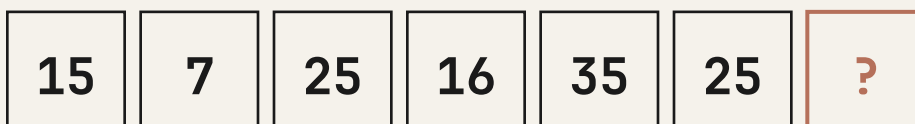
- A) 80    
  B) 56    
  C) 84    
  D) 86

**Puzzle 4.** What comes next in the sequence?



- A) 39    
  B) 40    
  C) 37    
  D) 27

**Puzzle 5.** What comes next in the sequence?



- A) 45    
  B) 46    
  C) 34    
  D) 44

### Pattern Puzzles – Pack 7

**Puzzle 6.** What number replaces the question mark in the grid?

3	6	12
4	12	36
3	6	?

- A) 12     
  B) 27     
  C) 8     
  D) 7

**Puzzle 7.** What comes next in the sequence?

3	7	15	31	63	127	?
---	---	----	----	----	-----	---

- A) 256     
  B) 254     
  C) 128     
  D) 255

**Puzzle 8.** What comes next in the sequence?

5	22	73	226	685	2062	?
---	----	----	-----	-----	------	---

- A) 6186     
  B) 6194     
  C) 6193     
  D) 2069

**Puzzle 9.** What comes next in the sequence?

12	24	40	60	84	112	?
----	----	----	----	----	-----	---

- A) 144     
  B) 127     
  C) 148     
  D) 140

**Puzzle 10.** What number replaces the question mark in the grid?

4	12	36
1	3	9
1	2	?

- A) 4     
  B) 9     
  C) 2     
  D) 6

## Answer Key

- 1. C) 71**  
Sequence: 22, 26, 37, 41, 52, 56, 67, ...
- 2. A) 27**  
Each row is a geometric sequence. Row 3 ratio:  $\times 3$ .
- 3. C) 84**  
Formula:  $2 \times n(n+1)/2 + 4n$ .
- 4. A) 39**  
Two interleaved series – odd: +9, even: +7.
- 5. A) 45**  
Two interleaved series – odd: +10, even: +9.
- 6. A) 12**  
Each row is a geometric sequence. Row 3 ratio:  $\times 2$ .
- 7. D) 255**  
Sequence: 3, 7, 15, 31, 63, 127, ...
- 8. C) 6193**  
Sequence: 5, 22, 73, 226, 685, 2062, ...
- 9. A) 144**  
Sequence: 12, 24, 40, 60, 84, 112, ...
- 10. A) 4**  
Each row is a geometric sequence. Row 3 ratio:  $\times 2$ .