



Date : 19th Nov 2023

Quantitative Aptitude - Missing Number Series

English

**Q:1 Direction:** What will come at the place of question mark (?) in given number series:

3, 7, 22, 89, ?, 2677

1. 446
2. 442
3. 440
4. 430
5. 426

**Q:2** What will come in place of the question mark (?) in the following number series?

32, ?, 44, 56, 72, 92, 116

1. 38
2. 32
3. 36
4. 40
5. None of these

**Q:3** What will come in place of the question mark (?) in the following number series?

2, -2, 30, -12, ?, -30, 250

1. 124
2. 130
3. 142
4. 156
5. None of these

**Q:4** What will come in place of the question mark (?) in the following number series?

144, 155, 142, 159, ?, 167, 126

1. 130
2. 132
3. 134
4. 136
5. 140

**Q:5** What will come in place of the question mark (?) in the following number series?

4, 4, 9, 29, 119, 599, ?

1. 3594
2. 2989
3. 3499
4. 3884
5. 3599

**Q:6** What will come in place of the question

mark (?) in the following number series?

2.5, 2, 3, 1.5, 3.5, ?, 4

1. 1
2. 2.5
3. 1.5
4. 0.5
5. 0

**Q:7** What will come in place of the question mark (?) in the following number series?

2, 7, 21, 57, ?, 353

1. 176
2. 154
3. 145
4. 184
5. None of these

**Q:8 Directions:** What will come in place of the question mark (?) in the following number series?

6, 13, 25, 51, 101, ?, 405, 911

1. 210
2. 201
3. 203
4. 198
5. None of these

**Q:9 Directions:** What will come in place of the question mark (?) in the following number series?

25, 29, 54, 83, 137, ?, 357

1. 220
2. 213
3. 209
4. 226
5. 234

**Q:10** What will come in place of the question mark (?) in the following number series?

98, 115, 139, 177, 236, ?

1. 326
2. 330
3. 316
4. 320
5. 323

## Answer Key

1. (1)	2. (3)	3. (2)	4. (4)	5. (5)
6. (1)	7. (3)	8. (3)	9. (1)	10. (5)

## Answers and Solutions

**Q:1** The correct answer is **option 1** i.e. **446**

The series follows the given pattern:

$$\begin{array}{ccccccccc}
 3 & & 7 & & 22 & & 89 & & 446 & & 2677 \\
 \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} \\
 \times 2 + 1 & & \times 3 + 1 & & \times 4 + 1 & & \times 5 + 1 & & \times 6 + 1
 \end{array}$$

Hence the missing term will be 446.

**Q:2** The correct answer is **option 3** i.e. **36**

The terms are increasing in multiple of 4,

$$\Rightarrow 36 + 8 = 44$$

$$\Rightarrow 44 + 12 = 56$$

$$\Rightarrow 56 + 16 = 72$$

$$\Rightarrow 72 + 20 = 92$$

$$\Rightarrow 92 + 24 = 116$$

Hence,  $32 + 4 = 36$  is the missing term.

**Q:3** The correct answer is **option 2** i.e. **130**

$$1 + 1^3 = 2$$

$$2 - 2^2 = -2$$

$$3 + 3^3 = 30$$

$$4 - 4^2 = -12$$

$$5 + 5^3 = 130$$

Hence, the missing term =  $5 + 5^3 = 130$

**Q:4** The correct answer is **option 4** i.e. **136**

$$144 + 11 = 155$$

$$155 - 13 = 142$$

$$142 + 17 = 159$$

The pattern of the difference between the numbers:

$$+(2 \times 1), -(2 \times 2), +(2 \times 3), -(2 \times 4) \dots$$

Hence, missing term =  $159 - 23 = 136$

To verify,

$$136 + 31 = 167$$

$$167 - 41 = 126$$

Hence, **136** is the missing value.

**Q:5** The correct answer is **Option 5** i.e. **3599**

The series follows the following pattern:

$$\Rightarrow 4 \times 1 + 0 = 4$$

$$\Rightarrow 4 \times 2 + 1 = 9$$

$$\Rightarrow 9 \times 3 + 2 = 29$$

$$\Rightarrow 29 \times 4 + 3 = 119$$

$$\Rightarrow 119 \times 5 + 4 = 599$$

$$\Rightarrow 599 \times 6 + 5 = 3599$$

$\therefore$  The missing term in the given series is 3599.

**Q:6** The correct answer is **option 1** i.e. **1**

The series has the following pattern:

$$\Rightarrow 2.5 - 0.5 \times 1 = 2$$

$$\Rightarrow 2 + 0.5 \times 2 = 3$$

$$\Rightarrow 3 - 0.5 \times 3 = 1.5$$

$$\Rightarrow 1.5 + 0.5 \times 4 = 3.5$$

$$\Rightarrow 3.5 - 0.5 \times 5 = 1$$

Hence, the missing value is 1

**Q:7** The correct answer is **option 3** i.e. **145**.

$$\text{1st Term} = 2 \times 1/2 + 1 = 2$$

$$\text{2nd term} = 4 \times 3/2 + 1 = 7$$

$$\text{3rd term} = 8 \times 5/2 + 1 = 21$$

$$\text{4th term} = 16 \times 7/2 + 1 = 57$$

$$\text{5th term or the missing term} = 32 \times 9/2 + 1 = 145$$

**Q:8** The correct answer is **option 3** i.e. **203**.

$$6, 13, 25, 51, 101, ?, 405, 911$$

Every term is multiplied by 2 from the previous term and it is added or subtracted by 1 in alternate terms

$$\Rightarrow 6 \times 2 + 1 = 13$$

$$\Rightarrow 13 \times 2 - 1 = 25$$

$$\Rightarrow 25 \times 2 + 1 = 51$$

$$\Rightarrow 51 \times 2 - 1 = 101$$

$$\Rightarrow 101 \times 2 + 1 = 203$$

Hence, the missing value is 203

**Q:9** The correct answer is **Option 1** i.e. **220**.

$$25, 29, 54, 83, 137, ?, 357$$

Since the 3rd term, every term is the sum of previous terms.

$$\text{Hence, missing value} = 137 + 83 = 220$$

**Q:10** The correct answer is **option 5** i.e. **323**.

It is a double-difference series.

Taking the difference of consecutive terms:



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$$115 - 98 = 17$$

$$139 - 115 = 24$$

$$177 - 139 = 38$$

$$236 - 177 = 59$$

Hence the series:

17, 24, 38, 59

Here the differences between consecutive terms is multiples of 7:

$$\text{Hence next term of this series} = 59 + 28 = 87$$

$$\text{Hence, Next term of original series} = 236 + 87 = 323$$

