



**SNS College of Technology(Autonomous)  
Coimbatore-35  
Academic Year 2023 – 2024 (Even)**



## **UNIT 2 QUANTITATIVE ABILITY IV**

**T5: Series**

Given a Series 25,49,121,169,?

Find what number would come in place of the question mark(?).

a) 225

b) 256

c) 289

d) 361

**Answer:** (c) 289

**Explanation:-**

Observing patterns carefully, you will observe that, this series is based on two concepts one is squares and the other is a prime number.

$$5^2 = 25$$

$$7^2 = 49$$

$$11^2 = 121$$

$$13^2 = 169$$

$$17^2 = 289$$

Hence, the correct answer is 289

Given a Series 1, 5, 9, 13, 17, 21, 25, ?

Find what number would come in place of the question mark(?).

a) 17

b) 22

c) 28

d) 19

**Answer :** (a) 17

**Explanation:-**

Observing the pattern carefully, you will observe that, this series consist of 2 different series.

Let me point out them for ease of understanding —

$$1 + 4 = 5$$

$$5 + 4 = 9$$

$$9 + 4 = 13$$

$$13 + 4 = 17.$$

Similarly,

$$30 - 4 = 26$$

$$26 - 4 = 22$$

$$22 - 4 = 18$$

Given a Series -10, -8, 6, 40, 102, ?

Find what number would come in place of the question mark(?).

- a) 105
- b) 117
- c) 216
- d) 129

**Answer :** (b) 117

**Explanation:**

Observing patterns carefully you will find that this question belongs to the category of square series.

$$-10 + ( 2^2 - 2 ) = -8$$

$$-8 + ( 4^2 - 2 ) = 6$$

$$6 + ( 6^2 - 2 ) = 40$$

$$40 + ( 8^2 - 2 ) = 102$$

$$102 + ( 10^2 - 2 ) = 200$$

Hence, the correct answer is 117.

Find the number which will come in the place of the question mark in the given series 4, 18, ?, 100, 180, 294, 448.

- a) 62
- b) 86
- c) 38
- d) 48

**Answer :** (d) 48

**Explanation:-**

Observing pattern carefully you will find that this question belongs to the category of squares and cube series.

$$2^3 - 2^2 = 8 - 4 = 4$$

$$3^3 - 3^2 = 27 - 9 = 18$$

$$4^3 - 4^2 = 64 - 16 = 48$$

$$5^3 - 5^2 = 125 - 25 = 100$$

$$6^3 - 6^2 = 216 - 36 = 180$$

$$7^3 - 7^2 = 343 - 49 = 294$$

$$8^3 - 8^2 = 512 - 64 = 448$$

Hence 48 would be our answer, as it is the number that would come in place of a question mark.

Given a Series 50, 45, 40, 35, 30, ?

Find what number would come in place of the question mark(?).

a) 28

b) 15

c) 25

d) 20

**Answer :** (c) 25

*If you observe the pattern, then you will see, it's nothing but constant difference series.*

$$50 - 5 = 45$$

$$45 - 5 = 40$$

$$40 - 5 = 35$$

$$35 - 5 = 30$$

$$30 - 5 = 25$$

*Hence, the correct answer is 25.*

Find the number which will come in the place of the question mark in the given series 11,12,15,20,27,?

a) 36

b) 35

c) 38

d) 41

**Answer :** (a) 36

**Explanation:-**

Here, the series follows a pattern of the sum of consecutive odd numbers.

$$11 + 1 = 12$$

$$12 + 3 = 15$$

$$15 + 5 = 20$$

$$20 + 7 = 27$$

$$27 + 9 = 36.$$

Hence, the missing number would be 36.

Find the number which will come in the place of the question mark in the given series 14, 25, 47, 91, 179, ?.

- a) 255
- b) 321
- c) 355
- d) 211

**Answer :** (c) 355

**Explanation:-**

observing the pattern we get that the difference between consecutive terms is being doubled every time.

$$25 - 14 = 11$$

$$47 - 25 = 22$$

$$91 - 47 = 44$$

$$179 - 91 = 88$$

So, if 88 is doubled, we get 176.

$$\text{Hence, } 179 + 176 = 355$$

Hence the missing term is 355.



