

NUMBER SERIES METHODS SHORTCUT TRICKS

Important Points to remember:

i). If numbers are in ascending order in the number series.

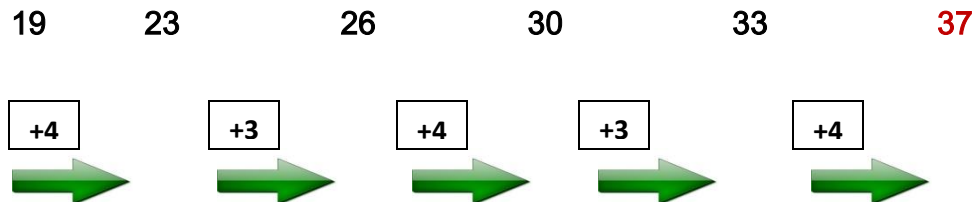
- Numbers may be added or multiplied by certain numbers from the first number.

SET – I:

Step 1 : Check whether it is ascending , descending or mixed order.

Example 1:

1. 19 23 26 30 33 ?



Step 2 : It is in ascending order. So add or multiply by certain numbers from the first number.

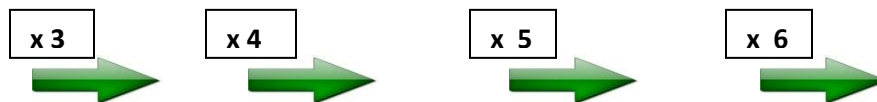
Step 3 : The difference between first number and second, and difference between second and third and so on., are in increasing order of +4 and +3

Step 4: Hence the answer for above series is 37.

Example 2:

2) 1 3 12 60 ?

1 3 12 60 360



Step 1 : Check whether it is ascending , descending or mixed order.

Step 2 : It is in ascending order. So add or multiply by certain numbers from the first number.

Step 3 : By adding first number and second, and second and third and so on., it is not in the sequence of increasing order. Try multiplication

Step 4: Take 1 and 3, let's start multiplying $1*3=3$, by seeing this we get to know, by multiplying $3*4$ it gives 12, and $12*5=60$.

Step 4: Hence the answer for above series is 360.

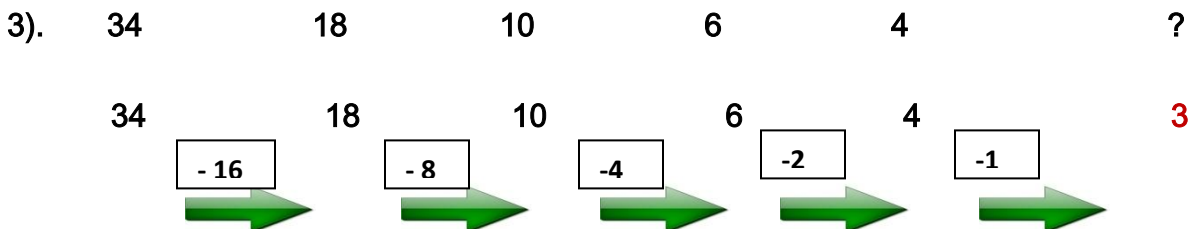
ii). If numbers are in descending order in the number series,

- numbers may be subtracted or divided by certain numbers from the first number.

SET – II :

Step 1 : Find whether the given number is in descending order.

Example 3:

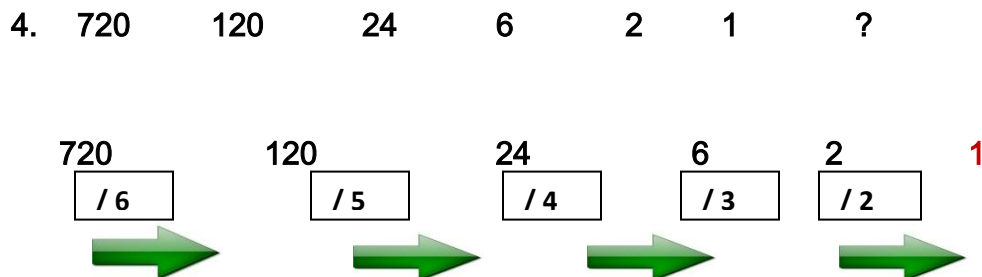


Step 2 : It is in descending order . So subtract or divide by certain numbers from the first number.

Step 3: The difference between first number and second, and difference between second and third and so on, are in order of -16,-8,-4,-2

Step 4: Hence the answer for above series is 3.

Example 4:



Step 1 : Check whether it is ascending , descending or mixed order.

Step 2 : It is in descending order. So subtract or divide by certain numbers from the first number.

Step 3 : By dividing first number by 6 it gives 120.

Divide $120/5=24$, $24/4=6$, $6/3=2$, $2/2=1$.It is in decreasing order.

Step 4: Hence the answer for above series is 1.

iii. If numbers are in mixing order (increasing and decreasing) in the number series.

- Numbers may be in addition, subtraction, multiplication and division in the alternate numbers.

Example 5:

200 165 148 117 104 ?

200 165 148 117 104 **77**

(14)²+4

(13)²-4

(12)²+4

(11)²-4

(10)²+4

(9)²-4



Step 1 : Check whether it is ascending , descending or mixed order.

Step 2 : It is in mixing order. So it may be in addition, subtraction, division and multiplication, squares and cubes.

Step 3 : In above series it is mixing of square, addition and subtraction.

$$(14)^2 = 196 + 4 = 200$$

(13)²=169. By adding 4 it gives 173. Try subtraction.

$$169 - 4 = 165$$

Here we found it is in order of squaring a number, adding by 4 and subtracting by 4.

Step 4: Hence the answer for above series is 77.

Example 6:

14 17 31 48 ? 127

14 17 31 48 79 127

$14+17=31$	$17+31=48$	$31+48=79$	$48+79=127$
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Step 1 : Check whether it is ascending , descending or mixed order.

Step 2 : It is in ascending order. So add or multiply by certain numbers from the first number.

Step 3 : In above series lets add first number with 3 i.e $14+3= 17$

But with second number we can't able to add +3 and so on.

Let's try adding first number and second number i.e. $14+17=31$

Second and third, i.e. $17+31 =48$ and so on

This series is in the form of miscellaneous

Step 4: Hence the answer for above series is 79