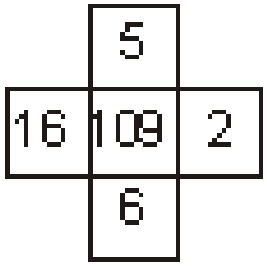
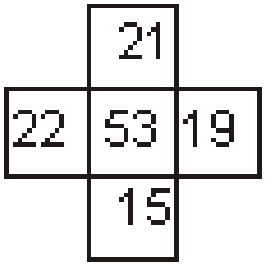
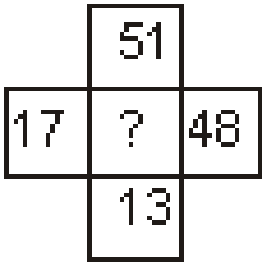
Inserting the Missing Character

In this chapter questions contain a figure, a set of figures, an arrangement or a matrix, each of which bears certain characters, be it numbers, letters or a group/combination of letters/numbers which follow a particular pattern. You are required to identify and decipher this pattern and accordingly find the missing character in the figure.

Example1 :







a) 7 b) 25 c) 49 d) 129

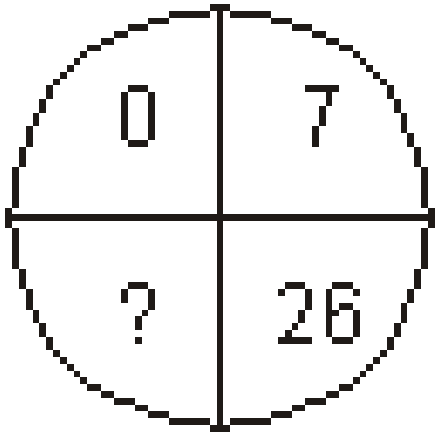
Solution. The pattern is

$$(16-6)^2+(5-2)^2 = 10^2+3^2 = 109$$

$$(22-15)^2+(21-19)^2 = 7^2+2^2 = 53$$

So, the missing number $= (17-13)^2+(51-48)^2 = 4^2+3^2 = 25$

Example 2:



a) 45 b) 50 c) 60 d) 63

Solution. Moving clockwise direction, the numbers are

$$1^3 - 1 = 0,\ 2^3 - 1 = 7,\ 3^3 - 1 = 26 \text{ and } 4^3 - 1 = 63$$

Practice Questions:

1.

51	11	61
64	30	32
35	?	43

a) 25
b) 27
c) 32
d) 37

Ans: B

2.

7	4	5
8	7	6
3	3	?
29	19	31

a) 3
b) 4
c) 5
d) 6

Ans: C

3.

18	24	32
12	14	16
3	?	4
72	112	128

a) 2
b) 3
c) 4
d) 5

Ans: B

4.

13	12	5
17	15	8
25	24	?
29	21	20

a) 7
b) 9
c) 11
d) 15

Ans: A

5.

3	15	4
7	38	5
3	?	5

a) 15
b) 18
c) 19
d) 20

Ans: B

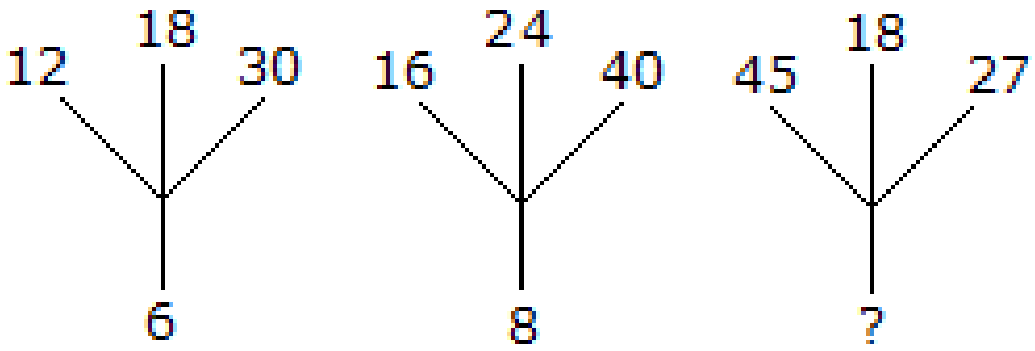
6.

1	2	3
11	7	5
120	45	?

a) 19
b) 17
c) 16
d) 15

Ans: C

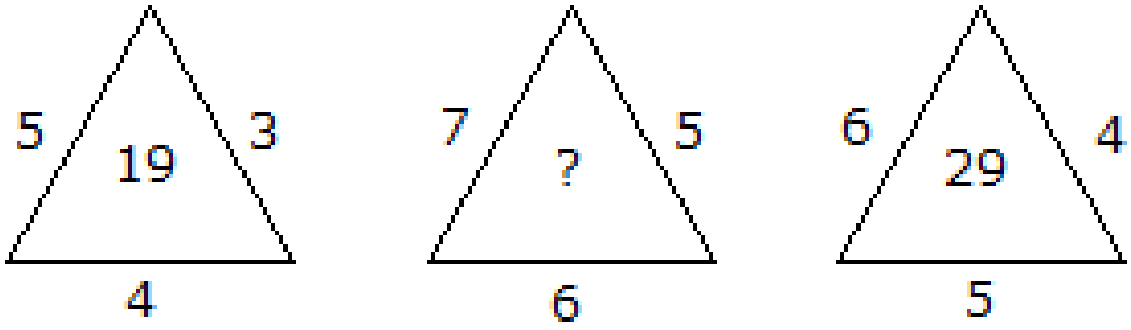
7.



a) 6
b) 9
c) 12
d) 18

Ans: B

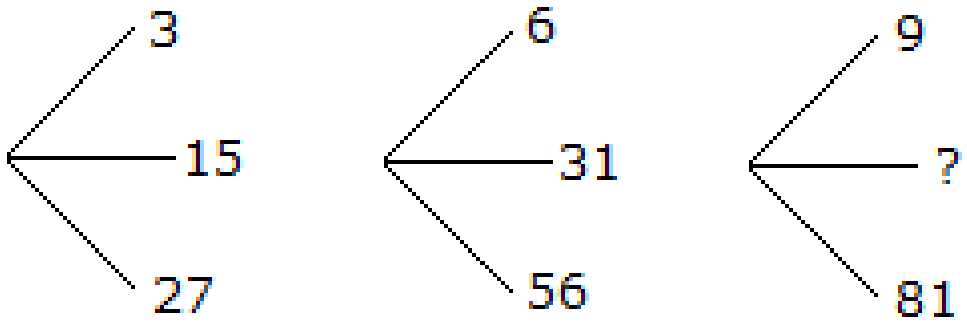
8.



a) 25
b) 37
c) 41
d) 47

Ans: C

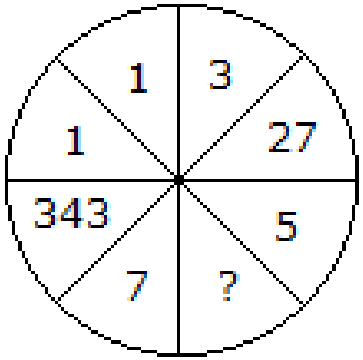
9.



a) 45
b) 41
c) 32
d) 40

Ans: A

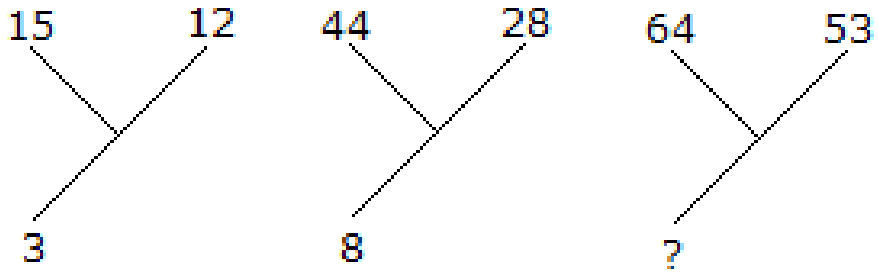
10.



a) 25
b) 625
c) 125
d) 50

Ans: C

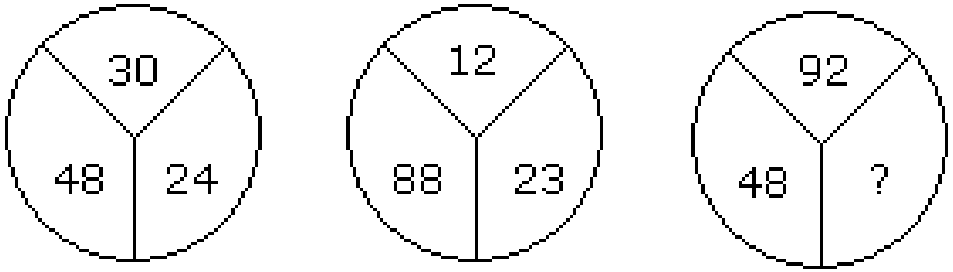
11.



a) 30
b) 13
c) 70
d) 118

Ans: B

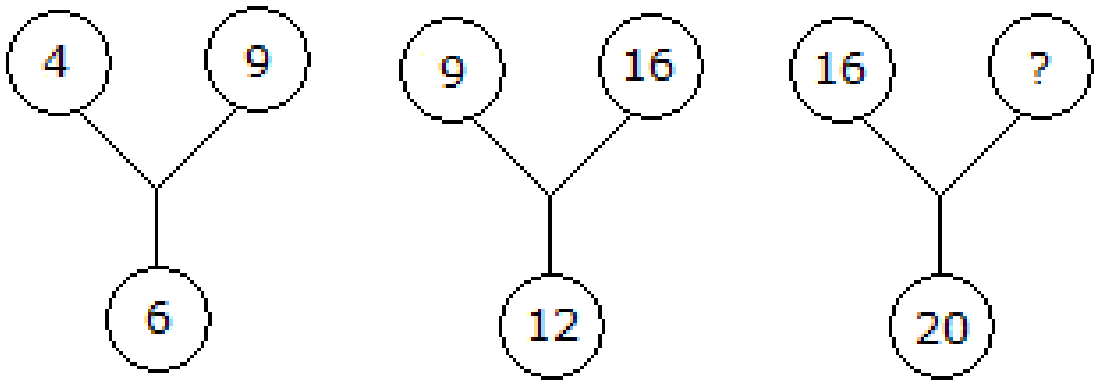
12.



a) 60
b) 46
c) 86
d) 75

Ans: C

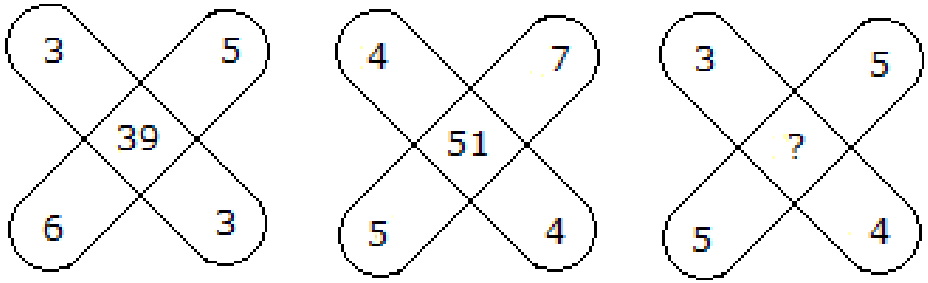
13.



a) 60
b) 50
c) 25
d) 21

Ans: C

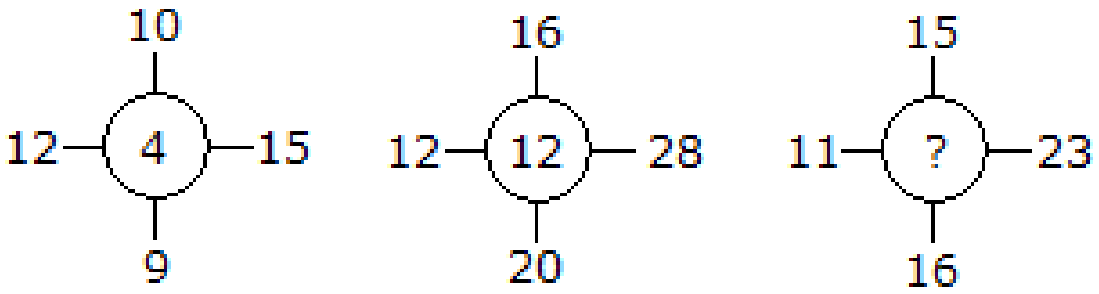
14.



a) 47
b) 45
c) 37
d) 35

Ans: C

15.



a) 11
b) 14
c) 10
d) 12

Ans: A