

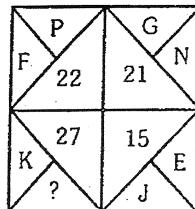
## 5. Inserting the Missing Character

In such type of questions, a figure, a set of figures, an arrangement or a matrix is given, each of which bears certain characters, be it numbers, letters or a group/combination of letters/numbers; following a certain pattern. The candidate is required to decipher this pattern and accordingly find the missing character in the figure.

### Solved Examples

**Direction :** Find the missing character from among the given alternatives.

**Ex.1**



(1) M

(2) P

(3) Q

(4) S

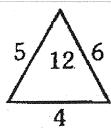
**Sol.** Putting A = 1, B = 2, C = 3, D = 4, ..... X = 24, Y = 25, Z = 26, we have:

$$F + P = 6 + 16 = 22; G + N = 7 + 14 = 21; J + E = 10 + 5 = 15.$$

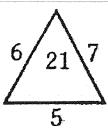
Since K = 11, so value corresponding to missing letter = (27 - 11) = 16.

So, the missing letter is the 16th letter of the English alphabet, which is P. Hence, the answer is (2).

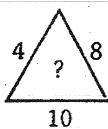
**Ex.2**



(1) 22



(2) 34



(3) 32

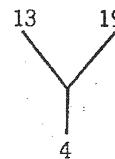
(4) None of these

**Sol.** Clearly, we have  $\frac{5 \times 6 \times 4}{10} = 12$ ;  $\frac{6 \times 7 \times 5}{10} = 21$ ;

$$\text{So, missing number} = \frac{4 \times 8 \times 10}{10} = 32$$

Hence, the answer is (3).

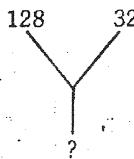
**Ex.3.**



(1) 10



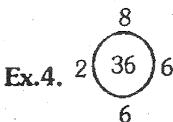
(2) 15



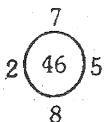
(3) 20

(4) 25

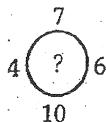
**Ex.4.**



(1) 42



(2) 46



(3) 48

(4) 50

**Sol.**

We have:  $(8 \times 6) - (2 \times 6) = 36$ ,  $(7 \times 8) - (2 \times 5) = 46$ .

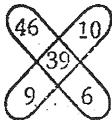
$$\therefore \text{Missing number} = (7 \times 10) - (4 \times 6) = 46.$$

Hence, the answer is (2).

**Ex.5**



(1) 12



(2) 25



(3) 48

(4) 52

**Sol.** We have:  $(56 + 15) - (22 + 8) = 41$ ,  $(46 + 9) - (10 + 6) = 39$ .

So, missing number  $= (34 + 11) - (14 + 6) = 25$ .

Hence, the answer is (2).

	5	
16	109	2
6		

	21	
22	53	19
15		

	51	
17	?	48
13		

(1) 7

(2) 25

(3) 49

(4) 129

**Sol.** We have:  $(16 - 6)^2 + (5 - 2)^2 = 10^2 + 3^2 = 109$ ;  $(22 - 15)^2 + (21 - 19)^2 = 7^2 + 2^2 = 53$ .

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

Hence, the answer is (2).

1	2	3
4	5	6
7	8	9
27	38	?

**Ex.7**

(1) 49

(2) 50

(3) 51

(4) 52

**Sol.** In the first column,  $(4 \times 7) - 1 = 27$ .

In the second column,  $(5 \times 8) - 2 = 38$ .

So, missing number  $= (6 \times 9) - 3 = (54 - 3) = 51$ .

Hence, the answer is (3).

**Ex.8**

F	I	O
A	J	K
E	M	?

(1) P

(2) R

(3) S

(4) V

**Sol.** Putting A = 1, B = 2, C = 3, ..., M = 13, ..., X = 24, Y = 25, Z = 26, we have:

In the first row, F + I = 6 + 9 = 15 = O.

In the second row, A + J = 1 + 10 = 11 = K.

So, in the third row, missing letter = E + M = 5 + 13 = 18 = R.

Hence, the answer is (2).

## EXERCISE

**Direction (Q.1 to Q.20) :** Find the missing term (?)

1. (1) 35      (2) 80      (3) 50      (4) None of these

2. (1) 83      (2) 86      (3) 81      (4) None of these

3. (1) O      (2) Z      (3) N      (4) None of these

4. (1) 166      (2) 196      (3) 216      (4) None of these

5. (1) 531      (2) 451      (3) 431      (4) 521

6. (1) 1000      (2) 900      (3) 980      (4) None of these

7. (1) E      (2) G      (3) J      (4) K

8. (1) 23      (2) 26      (3) 27      (4) 20

9. (1) 14      (2) 17      (3) 19      (4) None of these

10. (1) 16      (2) 17      (3) 18      (4) 19

11. 

4		2
	121	
2		3

?		2
6	361	9
3		

6		1
3	256	6
- (1) 2      (2) 3      (3) 5      (4) None of these
12. 

225		
289	55	169
	121	

196		
144	59	256
	324	

64		
100	43	?
	144	
- (1) 196      (2) 256      (3) 270      (4) None of these
13. 

8		27	
2		3	
6		24	
	64		?
	60		
- (1) 4      (2) 8      (3) 7      (4) 3
14. 

19		
31	24	23
	27	

75		
84	54	66
	57	

53		
41	?	65
	77	
- (1) 71      (2) 76      (3) 72      (4) 74
15. 

25	
16	36

81	
64	100

324	
289	?
- (1) 613      (2) 531      (3) 421      (4) 361
16. 

U		
Z	5	P
	A	K

M		
S	6	G
	A	

P		
S	?	M
	J	
- (1) 4      (2) 3      (3) 2      (4) None of these
17. 

7	9	
11	12	
16	15	18

19	18	
?	16	
18	18	19

17	18	
18	19	
- (1) 16      (2) 13      (3) 17      (4) 15
18. 

19	4	6	9
(1) 5			

31	24	6	1
(2) 6			

22	10	6	?
(3) 7			
- (4) 8
19. 

5	3
6	63
8	

2	7
3	41
9	

6	7
8	?
5	
- (1) 26      (2) 82      (3) 83      (4) 86
20. 

2	6
3	168
2	

3	5
2	120
1	

2	3
4	?
5	
- (1) 84      (2) 195      (3) 240      (4) None of these

EXERCISE

ANSWER KEY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
4	1	1	2	3	1	1	4	4	3	1	1	1	3	4	2	3	2	2	2