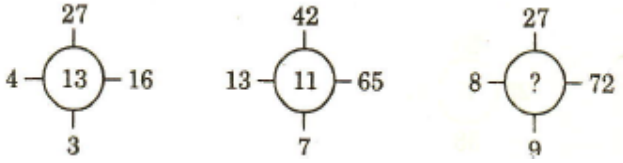
MISSING NUMBER IN FIGURES AND COUNTING FIGURES/
आकृतियों में लुप्त संख्या और आकृतियों की संख्या

Q. Find out the missing number from the given options.
दिए गए विकल्पों में से लुप्त संख्या ज्ञात कीजिये।

1.



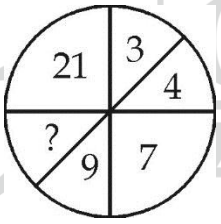
(a) 6 (b) 9
(c) 12 (d) 18

2.

4C	2B	3A
28A	?	45B
7C	5A	15B

(a) 10C (b) 10A
(c) 14B (d) 16C

3.

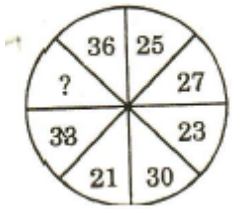


(a) 15 (b) 12
(c) 11 (d) 16

4.

(a) 13 (b) 15
(c) 17 (d) 19

5.



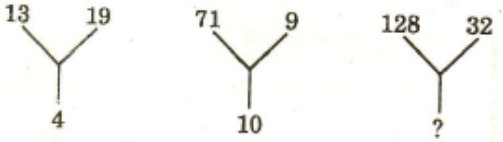
(a) 19 (b) 22
(c) 32 (d) 35

6.

8	7	6
7	6	5
6	5	4
90	65	?

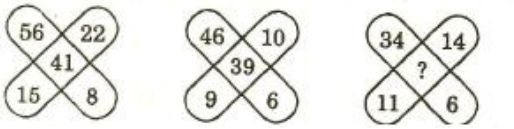
(a) 54 (b) 44
(c) 34 (d) 26

7.



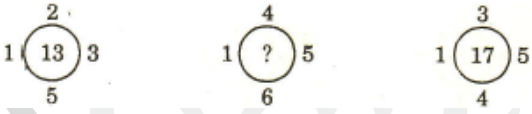
(a) 10 (b) 15
(c) 20 (d) 25

8.



(a) 12 (b) 25
(c) 48 (d) 50

9.



(a) 21 (b) 25
(c) 27 (d) 26

10.

6	6	8
5	7	5
4	3	?
120	126	320

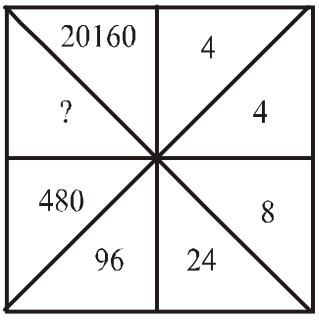
(a) 4 (b) 8
(c) 12 (d) 16

11.

17	19	23
15	16	19
128	210	?

(a) 336 (b) 84
(c) 168 (d) 1008

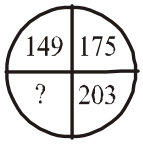
12.



(A) 860 (B) 1140

(C) 2880 (D) 3240

13.

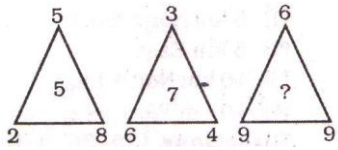


(A) 148 (B) 208
(C) 213 (D) 233

14. 6 7 5
7 8 6
8 9 ?
62 79 47
(a) 4 (b) 7
(c) 8 (d) 9

15. 9 4 5
12 16 15
15 20 25
180 80 ?
(a) 125 (b) 75
(c) 20 (d) 25

16.



(a) 10 (b) 9
(c) 12 (d) 11

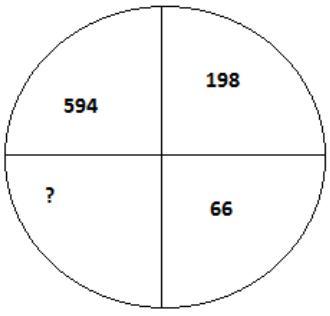
17.

254	108	12
178	67	42
?	82	38
305	93	16

(a) 72 (b) 63
(c) 127 (d) 132

18. Find the missing number form the given responses.
दिए गए विकल्पों में से लुप्त संख्या ज्ञात कीजिये।
6 15 20
8 4 5
3 5 20
102 130 ?
(a) 45 (b) 240
(c) 405 (d) 120

19. Insert the missing number/ लुप्त संख्या चुनिए।

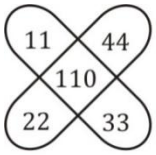


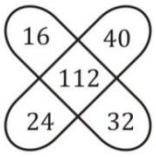
(a) 22 (b) 33
(c) 11 (d) 12

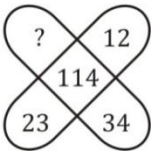
20.

(a)27 (b) 35
(c) 54 (d)64

21.

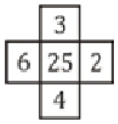


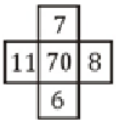


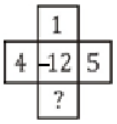


(a) 35 (b) 37
(c) 45 (d) 46

22.







(a) 1 (b) 2
(c) 6 (d) 10

23.

7B	5C	6B
3C	9B	19A
15A	17A	?

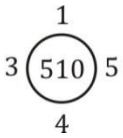
(a) 10 C (b) 12 C
(c) 14 B (d) 16 C

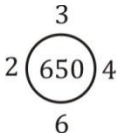
24.

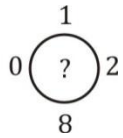
31	17	58	87
68	19	61	56
91	22	70	50
10	142	11	?

(a) 3 (b) 6
(c) 7 (d) 9

25.

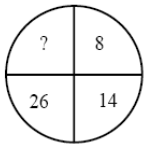






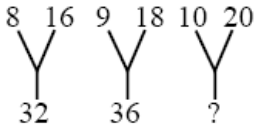
(a) 610 (b) 660
(c) 670 (d) 690

26.



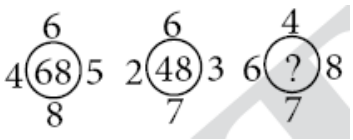
(a.) 44 (b.) 28
(c.) 40 (d.) 24

27.



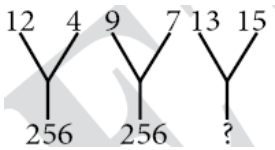
(a.) 30 (b.) 40
(c.) 24 (d.) 32

28.



(a.) 86 (b.) 87
(c.) 76 (d.) 89

29.



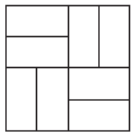
(a.) 594 (b.) 684
(c.) 564 (d.) 784

Figure Counting/ आकृतियों की संख्या

30. How many triangle are there in the figure given below?
नीचे दी गई आकृति में कितने त्रिभुज हैं?

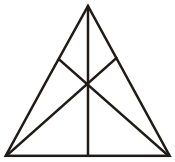
(a) 10 (b) 11
(c) 12 (d) 13

31. How many rectangles, which are not squares, are there in the following figure?
निम्नलिखित आकृति में, ऐसे कितने आयत हैं, जो वर्ग नहीं हैं?



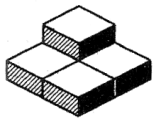
(a) 12 (b) 16
(c) 18 (d) 14

32. Find the number of triangles in the given figure.
दी गई आकृति में त्रिभुजों की संख्या ज्ञात कीजिये।



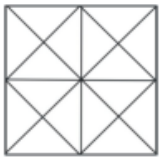
(A) 16 (B) 13
(C) 9 (D) 7

33. Count the number of blocks in the given figure.
दी गई आकृति में ब्लॉकों की संख्या ज्ञात कीजिये।



(A) 3 (B) 4
(C) 5 (D) 6

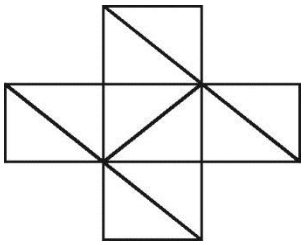
34. How many rectangles, that are not squares, are there in the following diagram?
निम्नलिखित आकृति में, ऐसे कितने आयत हैं, जो वर्ग नहीं हैं?



(a)10 (b)14
(c) 18 (d) 8

Directions : In the following question, count the number of triangles in the given figure.
निम्नलिखित प्रश्न में, दी गई आकृति में त्रिभुज की संख्या ज्ञात कीजिये।

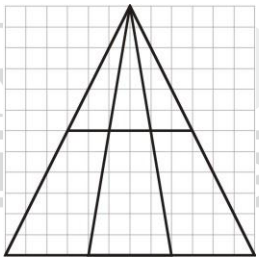
35.



(a) 10 (b) 12
(c) 15 (d) 16

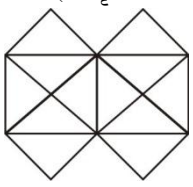
Directions: In each of the following questions, count the number of triangles in the given figure.
निम्नलिखित में से प्रत्येक प्रश्न में, दी गई आकृति में त्रिभुजों की संख्या ज्ञात कीजिये।

36.



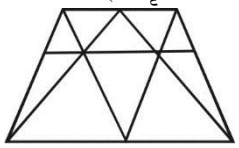
(a) 12
(b) 14
(c) 16
(d) 18

37. How many triangles are there in the figure ?
दी गई आकृति में कितने त्रिभुज हैं?



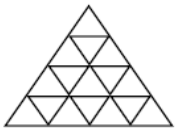
(a.) 12 (b.) 20
(c.) 22 (d.) 24

38. How many triangles are there in the figure given below?
नीचे दी गई आकृति में कितने त्रिभुज हैं?



(a.) 18 (b.) 19
(c.) 20 (d.) 21

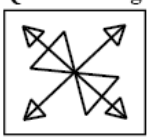
39. How many triangles are there in the following figures?
निम्नलिखित आकृति में कितने त्रिभुज हैं ?



(a.) 29 (b.) 27
(c.) 23 (d.) 30

40. Find out the number of triangles in this figure.
आकृति में त्रिभुजों की संख्या ज्ञात कीजिये।

Question Figure



(a.) 12 (b.) 14
(c.) 16 (d.) 18

SOLUTIONS

1. (c); We have: (27 ÷ 3) + (16 ÷ 4) = 13; (42 ÷ 7) + (65 ÷ 13) = 11

2. (a); In each row, out of the letters A, B and C, each of these must appear once. In each column, the product of the first and third numbers is equal to the second number. So, the missing number will be (2x 5) i.e. 10 and the letter will be C .
Thus, the answer is 10C.

3. (b);

4. (b); The sum of the two numbers in the upper part is 7 times the number in the lower part.
So, missing number = (89 + 16) ÷ 7 = 15

5. (a): Starting from 27and moving clockwise, the numbers in alternate segments form the series: 27, 30, 33, 36.
The numbers in remaining segments, moving anticlockwise, may form the series:
?, 21, 23,25 or 21,23,25,?., So, the missing number is either 19 or 27.

6. (b). (8+7)x6=90; (7+6)x5=65; (6+5)x4=44

7. (c). Clearly, we have : $\frac{13+19}{8} = 4$; $\frac{71+9}{8} = 10$

So, missing number = $\frac{128+32}{8} = 20$.

8. (b)We have : (56 + 15) – (22 + 8) = 41, (46 + 9) – (10 + 6) = 39. So, missing number = (34 + 11) – (14 + 6) = 25.

9. (d)

10. (b): In the first columned, 6 x 5x 4 = 120.
In the second column, 6 x 7 x 3 126.
Let the missing number be x. Then, in the third column, we have: 8 x 5x X=320 ⇔x = 320/40 = 8.

11. (a) $17^2 - 15^2 = 64 * 2 = 128;$
$19^2 - 16^2 = 105 * 2 = 210;$
$23^2 - 19^2 = 168 * 2 = 336$

12. C; As, 4 × 1 = 4
4 × 2 = 8
8 × 3 = 24
24 × 4 = 96
96 × 5 = 480
Similarly, 480 ×6 = 2880
and 2880 × 7 = 20160

13. D; As, $12^2 + 5 = 144 + 5 = 149$
$13^2 + 6 = 169 + 6 = 175$
$14^2 + 7 = 196 + 7 = 203$
Similarly, $15^2 + 8 = 225 + 8 =$ 233

14. (b)

15. (b) LCM of 5,15 and 25=75

16. (c)

17. (c); 254+178=305-x , 108+67=82+93, 12+42=38+16.

18. (b) 6 x 8 + 3 = 51*2=102
15 x 4 + 5 = 65*2=130
20 x 5 + 20 = **120*2=240**

19. (a) 594 ÷ 198 = 3
198 ÷ 66 = 3
? = 66 ÷ 3 = **22**

20. (b): We have: (3 x 8 x 4) ÷ 2 = 48. So, missing number = (5 x 7 x 2) ÷ 2 = 35.

21. (c); 11 + 44 + 22 + 33 = 110
Similarly x = 114 – (12 + 23 + 34) = 45

22. (b) $(3^2 + 6^2) - (2^2 + 4^2) = 25$, similarly
$(1^2 + 4^2) - (5^2 + x^2) = -12 \Rightarrow x = 2$

23. (d)In each row, out of the letters A,B, and C, each of these must appear once. Along the diagonals the sum of two number is equal to third
So the missing number will be 7+9=16 and letter will be C.

24. (c);The sum of each column is 200.

25. (d); $(1^2 + 5^2 + 4^2 + 3^2) \times 10 = 510$
So, $(1^2 + 2^2 + 8^2 + 0^2) \times 10 = 690$

26. a

27. b

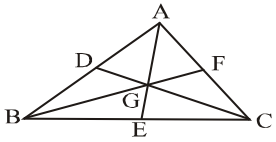
28. c

29. d

30. (b)

31. (b)

32. A;



(I) ADG, AFG, DBG, FGC, CGE, EGB = 6
(II) AEC, AEB, CDB, CDA, BFA, BFC = 6
(III) AGB, ACG, BGC = 3
(IV) ABC = 1
Total = 16

33. C; In the figure there are - 1 columns containing 2 blocks and 3 columns containing 1 block each.
Total no. of cubes = (1×2) + (3×1) = 5

34. (d)

35. (d)

36. (a)

37. (c)

38. (c)

39. (d)

40. (d)