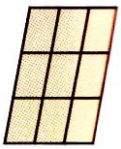
Analytical Reasoning

REASONING WORKBOOK

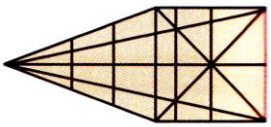
QUESTIONS

1. Count the number of straight lines in the given figure.



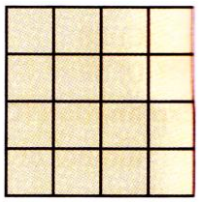
(a) 6 (b) 8 (c) 10 (d) 12

2. How many straight lines are there in the given figure?



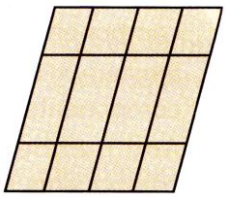
(a) 15 (b) 16 (c) 17 (d) 18

3. Count the number of squares in the given figure.



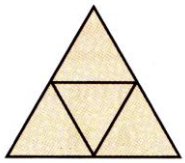
(a) 16 (b) 22 (c) 30 (d) 36

4. Count the number of parallelograms in the given figure.



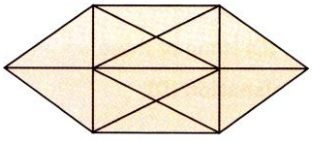
(a) 48 (b) 60 (c) 72 (d) 98

5. Find the number of triangles in the adjoining figure.



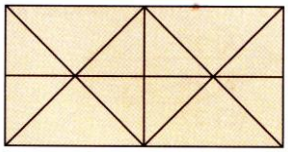
(a) 5 (b) 6 (c) 7 (d) 9

6. How many triangles do the given figure consist of?



(a) 14 (b) 18 (c) 22 (d) 28

7. Count the number of triangles in the adjoining figure.

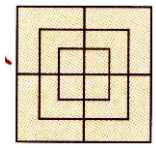


(a) 28 (b) 26 (c) 20 (d) 12

8. How many squares are there in all on the chessboard?

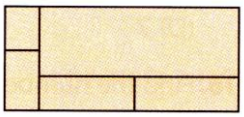
(a) 108 (b) 144 (c) 196 (d) 204

9. Count the number of squares in the given figure.



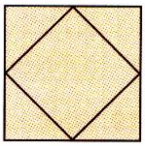
(a) 13 (b) 14 (c) 15 (d) 16

10. Find the number of rectangles in the adjoining figure.



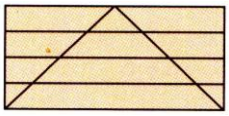
(a) 6 (b) 8 (c) 9 (d) 11

11. How many pentagons are there in the following geometrical figure?



(a) 4 (b) 8 (c) 12 (d) 1

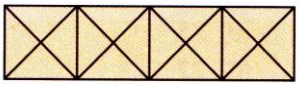
12. How many triangles and rectangles are there in the adjoining figure?



(a) 12 triangles, 10 rectangles (b) 8 triangles, 4 rectangles

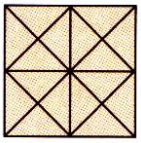
(c) 12 rectangles, 10 triangles (d) 8 rectangles, 4 triangles

13. How many triangles are there in the adjoining figure?



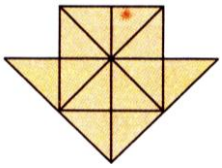
(a) 16 (b) 32 (c) 38 (d) 42

14. Count the number of squares in the adjoining figure.



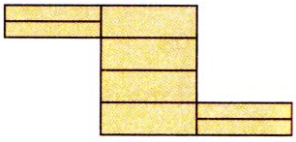
(a) 10 (b) 11 (c) 12 (d) 13

15. How many triangles are there in the adjoining figure?



(a) 20 (b) 26 (c) 27 (d) 28

16. How many rectangles are there in the adjoining figure?

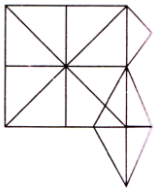


(a) 8 (b) 17 (c) 18 (d) 20

17. How many rectangles are there in the given figure?

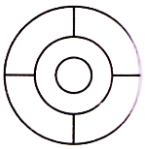
(a) 10 (b) 9 (c) 8 (d) 7

18. Find the number of triangles in the given figure.



(a) 26 (b) 27 (c) 25 (d) None of these

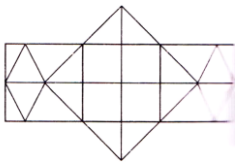
19. What is the minimum number of different colours required to paint the adjoining figure such that no two adjacent regions have the same colour?



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

20. How many triangles can be formed in the given figure?

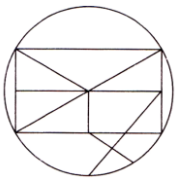
(SOF NCO 2016)



(a) 24 (b) 25 (c) 27 (d) None of these

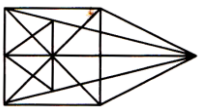
21. Count the number of triangles in the given figure.

(SOF NCO 2016)



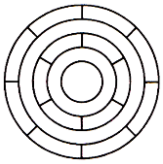
(a) 9 (b) 10 (c) 11 (d) None of these

22. Count the number of triangles formed in the given figure. **(SOF NSO 2016)**



(a) 36 (b) 32 (c) 38 (d) None of these

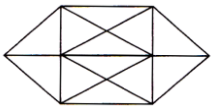
23. What is the minimum number of different colours required to paint the given figure such that no two adjacent regions have the same colour? **(SOF IMO 2016)**



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

24. Count the number of triangles and minimum number of straight lines respectively in the given figure,

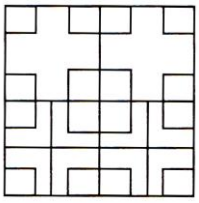
(SOF NSO 2017)



(a) 30, 11 (b) 28, 13 (c) 26, 14 (d) None of these

25. How many squares are there in the given figure?

(SOF IMO 2017)



(a) 24 (b) 23 (c) 27 (d) None of these

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ANSWER - KEY									
1.	B	**2.**	A	**3.**	C	**4.**	B	**5.**	A
6.	D	**7.**	A	**8.**	D	**9.**	C	**10.**	C
11.	C	**12.**	A	**13.**	C	**14.**	A	**15.**	D
16.	C	**17.**	B	**18.**	D	**19.**	A	**20.**	D
21.	B	**22.**	D	**23.**	A	**24.**	B	**25.**	D

EXPLANATIONS

1. (b): Count horizontal and slanting lines.

2. (a) : Add the numbers of horizontal, vertical and slanting straight lines.

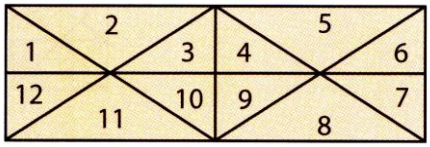
3. (c) : $4^2+3^2+2^2+1^2=30$.

4. (b) : Numbers of parallelograms having 1, 2, 3,4,6,8, 9 and 12 components are 12, 17,10, 9, 7, 2, 2 and 1 respectively.

5. (a):$4+1=5$.

6. (d):$12+10+4+2$

7. (a) : $\Delta^1=12,\Delta^2=6,\Delta^3=8,\Delta^6=2$.



8. (d): $8^2+7^2+6^2+\ldots+2^2+1^2=204$.

9. (c) : $W^1=4,\ W^2=4,\ W^3=4,\ W^4=1,\ W^8=1,\ W^{12}=1$.

10. (c) $X^1=5,X^2=2,X^3=1,X^5=1$.

11. (c) Not Available

12. (a) $\Delta^1=\Delta^2=\Delta^3=\Delta^4=3$,

$X^1=4,X^2=3,X^3=2,X^4=1$.

13. (c) $\Delta^1=16,\ \Delta^2=16,\ \Delta^4=6$.

14. (a)

$\square^2=4,\square^4=4,\square^8=1,\square^{16}=1$.

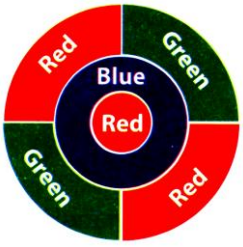
15. (d) $\Delta^1=12,\Delta^2=9,\Delta^4=6,\Delta^8=1$

16. (c) $X^1=8,\ X^2=5,\ X^3=4,\ X^4=1$.

17. (b) $X^1=4,X^2=4,X^{4.}=1$.

18. (d) Not Available

19. (a)



20. (d) Not Available

21. (b) Not Available

22. (d) Not Available

23. (a) Not Available

24. (b) Not Available

25. (d) Not Available