

M311

extends patterns in simple shapes and numbers

LEVEL-1

Test item-1: Figure out the rule of the pattern and identify next two faces of the dice (in order).



Option A:  , 

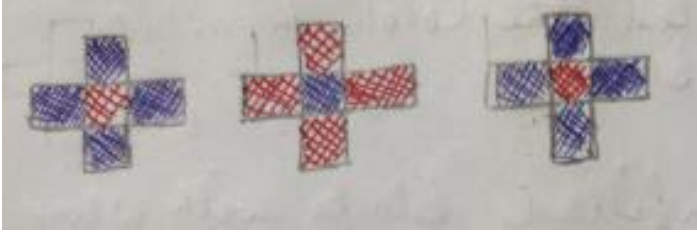
Option B:  , 

Option C:  , 

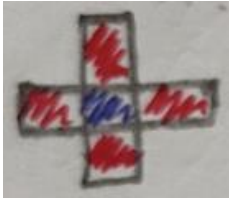
Option D:  , 

Correct option: B

Test item-2: Find the next term of the pattern.



Option A:



Option B:



Option C:



Option D:

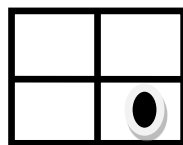
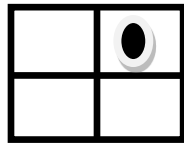
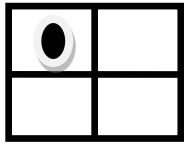


Correct option: (A)

Hints/ Solution

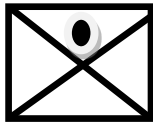
Centre part of the figure changing color as: red, blue, red, **blue**
Other part of the figure changing color as: blue, red, blue, **red**

Test item-3: Find the next term of the pattern.

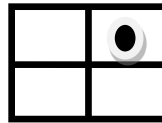


?

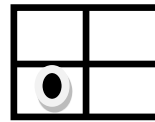
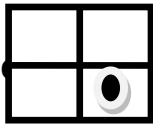
Option A:



Option B:



Option C:



Correct option: D

Hints/ Solution

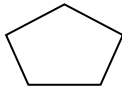
There is a sign of + in each square the dot is moving clockwise from one small square to another

Test item-4:

Find the missing figure in the given pattern.



Option A :



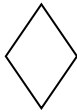
Option B:



Option C:



Option D:



Correct Option: C

Hints/ Solution:

Number of sides is increasing in each step.

Test item-5: Find the next term in the given pattern

11, 15, 19, __

Option A: 11

Option B: 23

Option C: 17

Option D: 20

Correct option: B

Hints/ Solution

4 is being added to every term to get the next term

$$19 + 4 = 23$$

Test item-6:

Find the next term in the given pattern.

9, 10, 12, 15,

Option A: 17

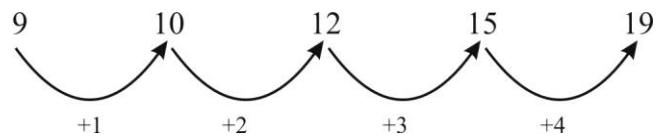
Option B: 19

Option C: 18

Option D: 20

Correct Option: B

Hints/ Solution:



Test item-7:

Which number will come next in this number pattern?

81, 72, 63 -----

Option A: 45

Option B: 54

Option C: 55

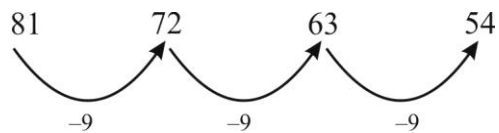
Option D: 53

Correct Option: B

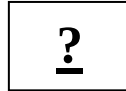
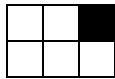
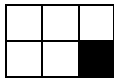
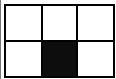
Hints/ Solution:

Multiplication table of 9

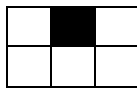
or



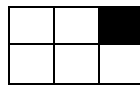
Test item-8: Observe the pattern and replace the question mark with correct picture.



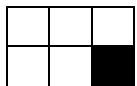
Option A:



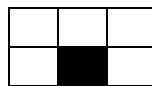
Option C:



Option B:

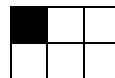
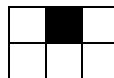
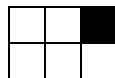
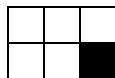
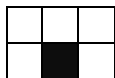


Option D:



Correct option: (A)

Hints/ Solution



The position of shaded area moving anticlockwise from one square to another.

Test item-9: Which of the following is not a rule of the number pattern given?
7, 14, 21, 28, 35

Rule-I : Add 7

Rule-II : Table of 7

Rule-III : Subtract 7

Hints/ Solution

Rule-III is not true.

Rule-I: 7, 14, 21, 28, 35

$$\begin{array}{ccccccc} & \boxed{} & \boxed{} & \boxed{} & \boxed{} & \boxed{} & \\ +7 & & +7 & & +7 & & +7 \end{array}$$

Rule-II: 7, 14, 21, 28, 35
(This is a table of 7)

Rule-III: Numbers are increasing. This rule cannot be applied here.

Test item-10: Find the next term in the given pattern.

11P, 13R, 15T, ____

Option A: 16V

Option B: 17W

Option C: 17U

Option D: 17V

Correct option: D

Hints/ Solution

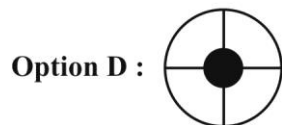
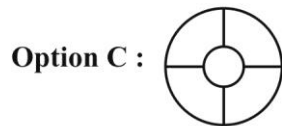
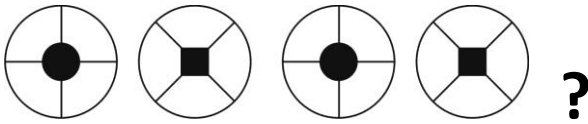
2 is the term which is being added in the previous one .

.alphabates are appearing skipping after one another

LEVEL-2

Test item-1:

Which of the following will complete the given pattern?



Correct Option: D

Hints/Solution:

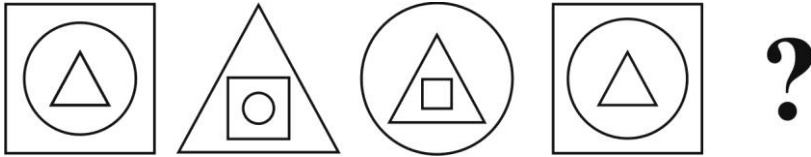
Inside the bigger circle, signs are changing alternately i.e., + then $\times$ then + then $\times$ and so on.

Also, shaded shape (smaller) inside each circle is also changing alternately i.e., then then and so on.

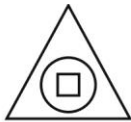


Test item-2:

Which of the following will complete the given pattern?



Option A :



Option B :



Option C :



Option D :

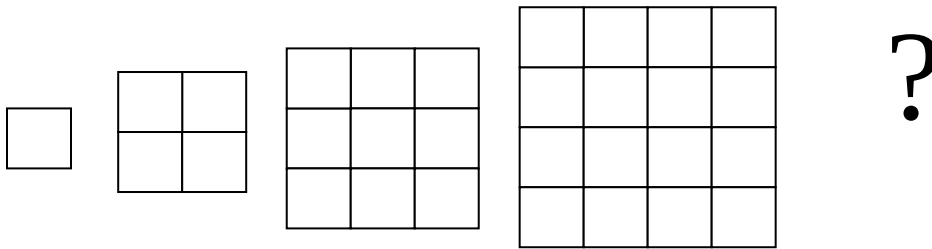


Correct Option: B

Hints/Solution :

In the every figure, the inner most shape of the previous figure becomes outermost shape, the outermost shape becomes the middle one and the middle one becomes the innermost.

Test item-3: Figure out the rule and identify how many blocks will come in place of missing figure?



Option A : 20

Option B: 25

Option C: 30

Option D: 21

Correct Option: B

Hints/ Solution:

Step 1: $1 \times 1 = 1$ block

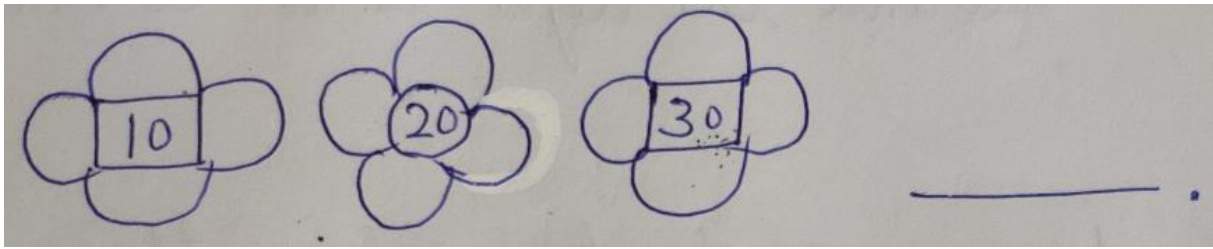
Step 2: $2 \times 2 = 4$ blocks

Step 3: $3 \times 3 = 9$ blocks

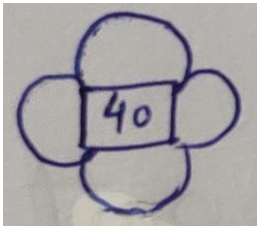
Step 4: $4 \times 4 = 16$ blocks

Step 5: $5 \times 5 = 25$ blocks

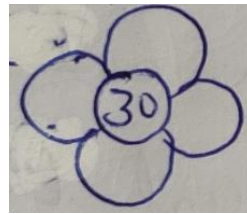
Test item-4: What will come next in the following pattern?



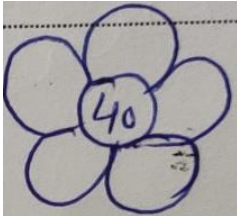
Option A:



Option B:



Option C:



Option D:



Correct option: D

Hints/ Solution

Option D is correct

Step – 1 - Digit in the middle – 10, 20, 30, **40**

Step – 2 – Shapes around the digit - ☐, ☐, ☐, ☐, ☐

Test item-5: Look at the given pattern and find out what will come next.

A 10 Z, B 20 Y, C 30 X, _____

Option A: C 40 W

Option B: D 40 W

Option C: D 40 X

Option D: W 40 D

Correct option: (B)

Hints/ Solution

A	10	Z
B	20	Y
C	30	X
D	40	W

Test item-6: Look at the pattern and choose the correct option to replace the ? (question mark).

2	2	4
3	3	9
4	4	?

Option A: 8

Option B: 16

Option C: 13

Option D: 5

Correct option: B

Hints/ Solution

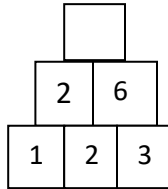
The following pattern is as follow

Row-1: $2 \times 2 = 4$

Row-2: $3 \times 3 = 9$

Row-3: $4 \times 4 = 16$

Test item-7: Observe the pattern in the block tower and find the number which will come in the blank box.



Option A: 8

Option B: 2

Option C: 6

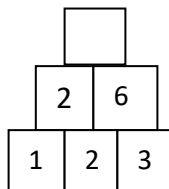
Option D: 12

Correct option: (D)

Hints/ Solution

Middle Row: $2=1 \times 2$ and $6=2 \times 3$

So, Top Row: $2 \times 6=12$



Test item-8:Observe the given pattern.

1, 2, 4, 7, 11, 16

Now, apply the same rule and find the next terms of the following pattern.

2, __, __, __, __.

Option A: 4, 7, 11, 16

Option B: 3, 5, 8, 12

Option C: 3, 5, 7, 12

Option D: 3, 4, 5, 6

Hints/ Solution

Correct option: (B)

Option B is correct

→

2, 3 5 8 12
□ □ □ □
+ 1 + 2 + 3 + 4

1, 2, 4, 7, 11, 16
□ □ □ □ □
+ 1 + 2 + 3 + 4 + 5

Test item-9: Observe the pattern and find out the next even number in the series.

500, 496, 492, _____, _____, _____

Option A: 490, 488, 486.

Option B: 488, 484, 480

Option C: 488, 486, 484

Option D: 488, 484, 482

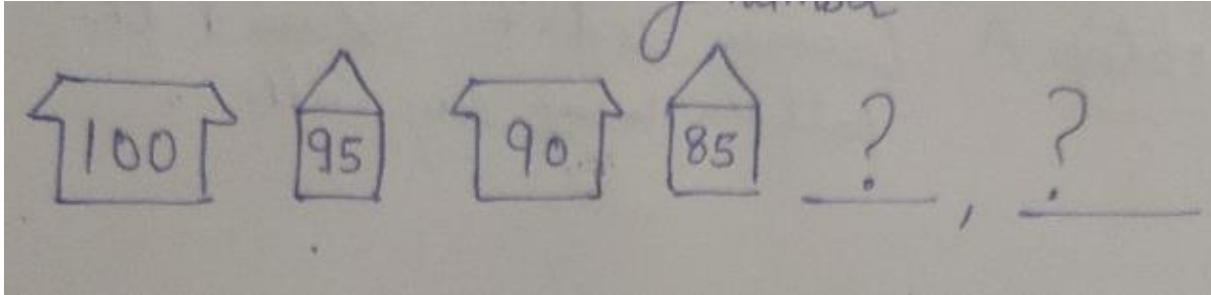
Correct option: (B)

Hints/ Solution

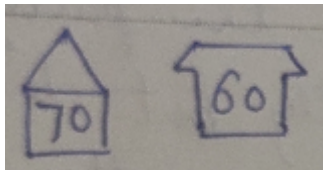
500, 496, 492, **488,** **484,** **480**

$\begin{array}{c} \text{┌} \quad \text{┐} \\ \text{└} \quad \text{┘} \\ -4 \end{array}$ $\begin{array}{c} \text{┌} \quad \text{┐} \\ \text{└} \quad \text{┘} \\ -4 \end{array}$ $\begin{array}{c} \text{┌} \quad \text{┐} \\ \text{└} \quad \text{┘} \\ -4 \end{array}$ $\begin{array}{c} \text{┌} \quad \text{┐} \\ \text{└} \quad \text{┘} \\ -4 \end{array}$ $\begin{array}{c} \text{┌} \quad \text{┐} \\ \text{└} \quad \text{┘} \\ -4 \end{array}$

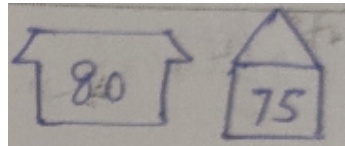
Test item-10: Find the next two terms of the pattern.



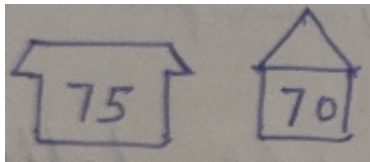
Option A:



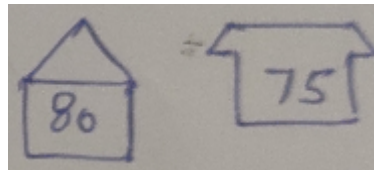
Option B:



Option C:



Option D:



Correct option: (B)

Hints/ Solution

Step 1 Roof of house is changing from flat to slanting, slanting to flat

Step 2 Number pattern

$100 - 5 = 95$ [5 is subtract at every step]

$95 - 5 = 90$

$90 - 5 = 85$