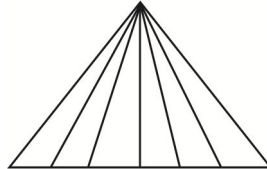
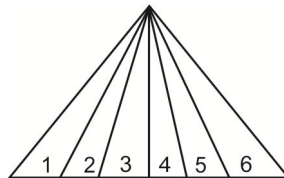


**COUNTING OF FIGURES**

In this type of questions we have some figures we have to count number of triangle, squares circles etc. as per question direction.

See some tricks to calculate in easy manner

**1. TRIANGLES IN TRIANGLE :-****Q.1. HOW MANY TRIANGLES IN FIGURE?****SOL:-**

Triangles formed from one block = 6

If the number of triangles formed from such figure is asked. First we write the number in blocks and after that we used the formulas

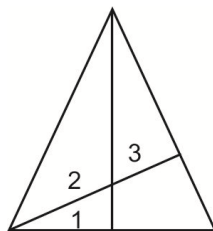
**No. of triangles =  $n(n+1)/2$**

Where n is biggest number of block in this figure the biggest number is 6

Therefore n = 6 is used

Therefore Total number of triangles =

$$6(6+1)/2 = 6 \times 7 / 2 = 21 \text{ triangles}$$

**Q.2. HOW MANY TRIANGLES IN FIGURE?**

**SOL: TRICK: - SMALL TRIANGLES + (NO OF DIAGONAL)<sup>2</sup>+1(LARGE TRIANGLE)**

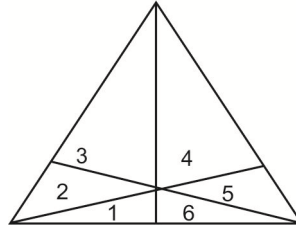
HERE SMALL TRIANGLE ARE =3

DIAGONAL = 2

Total number of Triangles:  $3 + (2)^2 + 1 = 8$

↓  
No. of diagonals

Q.3. HOW MANY TRIANGLES IN FIGURE?

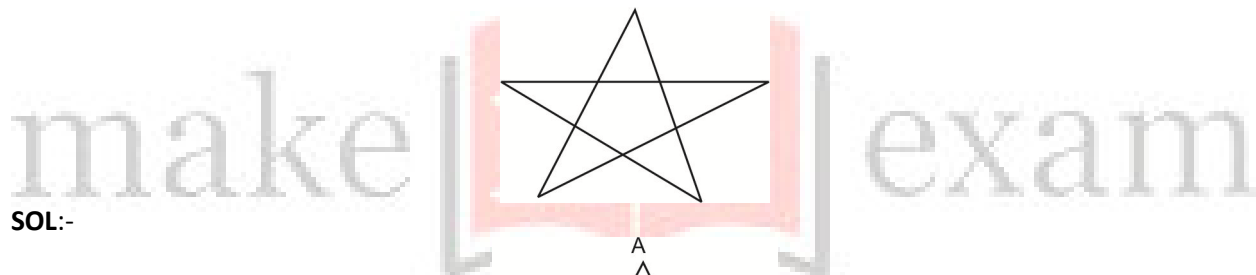


SOL:-

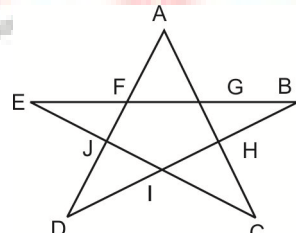
Total number of Triangles =  $6 + (3)^2 + 1 = 16$

↓  
( No. of diagonals )

Q.4. How many triangles is therein the following figure?

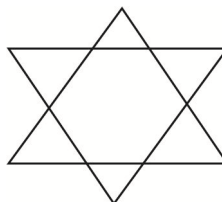


SOL:-

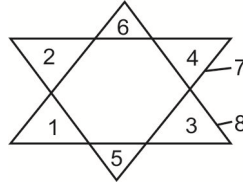


Name of the triangles are AFG, GBH, HCI, IDJ, JEF, ACJ, CEG, EBI, BDF, ADH  
Hence, there are 10 triangles in this figure

Q.5. How many triangles is therein the following figure?



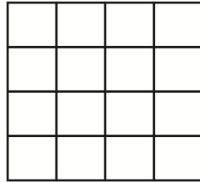
SOL:-



Hence, there are 8 triangles in this figure

**2. SQUARE IN SQUARE:-**

**Q.1. HOW MANY SQUARE IN FIGURE?**

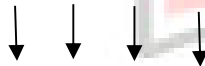


1	2	3	4
2			
3			
4			

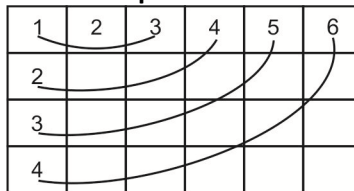
SOL:-

**TRICK DIAGONAL MULTIPLE**

Total no. of squares =  $1^2 + 2^2 + 3^2 + 4^2 =$

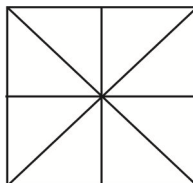


$1 + 4 + 9 + 16 = 30$  squares

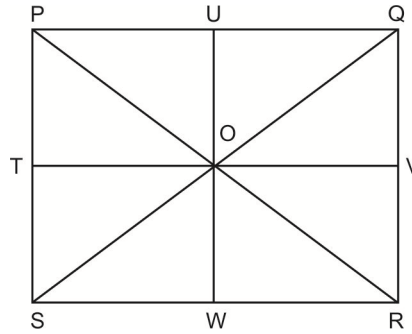


**3. TRIANGLES IN SQUARE:-**

**Q.1. How many triangles are there in the following figures?**



SOL:- Naming the figure

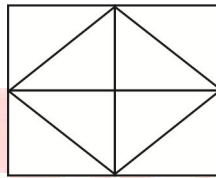


Name of the triangle present in the figure are POU, UOQ, QOV, VOR, ROW, WOS, SOT, TOP, SOP, POQ, QOR, ROS, SPR, QPR, SQP, SQR.

Hence there are 16 triangles present in the figure.

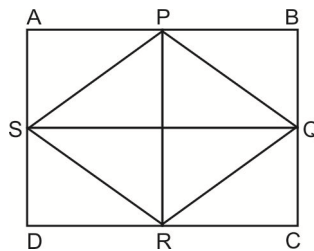
**PRACTICE QUESTIONS**

**Q1. How many numbers of triangles are there in the above figure?**



- a.8    b.10    c.12    d.14

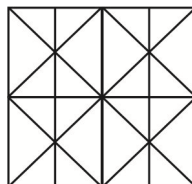
**Sol.** Names of the



Now names of the triangles are:

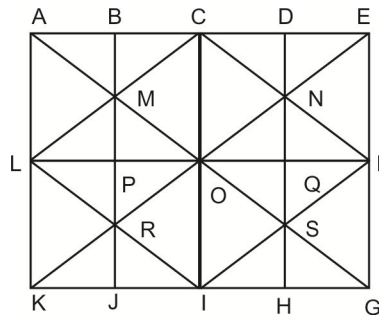
APS, PBQ, QCR, RDS, POS, POQ, ROQ, ROS, PQS, RSQ, PRS, PRO. Hence there are twelve triangles in this figure.

**Q2. How many lines are there in the given diagram?**



a.14   b.16   c.18   d.12

Sol.



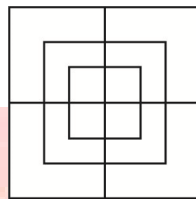
Horizontal lines = AE, LF, KG = 3

Vertical lines = AK, BJ, CI, DH, EG = 5

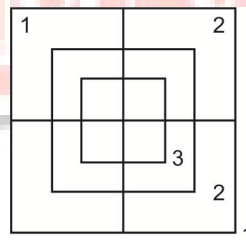
Slanting lines = LC, KE, IF, LI, AG, CF = 6

Therefore, Total number of lines = 3 + 5 + 6 = 14

**3Q. HOW MANY SQUARE IN FIGURE?**



Sol :



As we have a square shape so  $1^2 + 2^2$

But this fig is 3 times so

Total no of squares is  $3*(1^2 + 2^2) = 3*5=15.$