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Sahi Prep Hai Toh Life Set Hai

Q1-2

Counting of Figures

Concepts

Part 1

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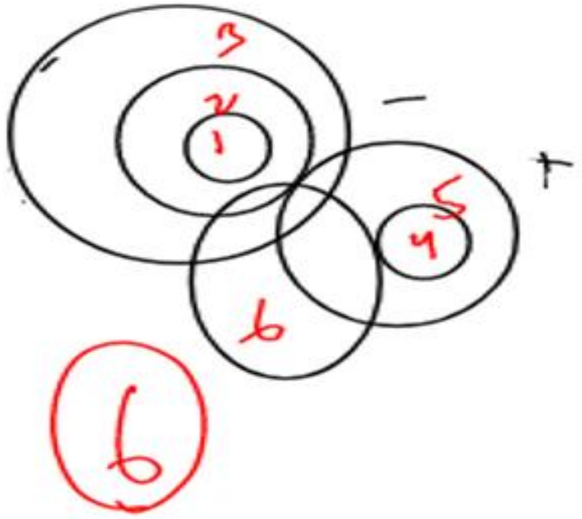
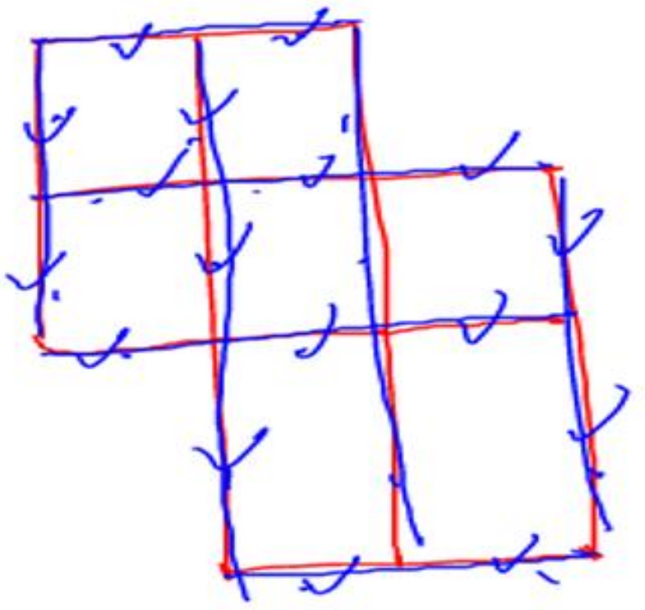
Agenda of the session

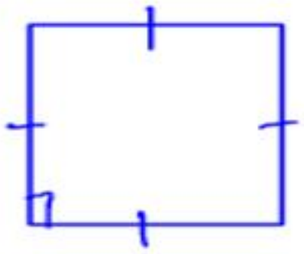
1. Triangle
2. square
3. Rectangle
4. Line
5. Circle.



Line segment = ? 10

Line = ? H = 4
V = 4
8

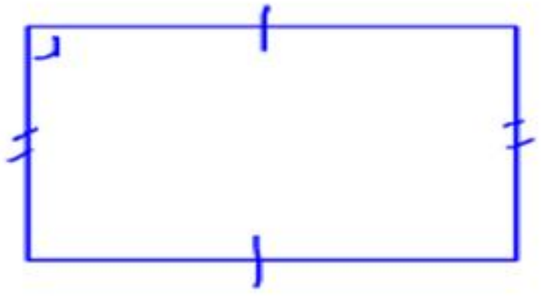




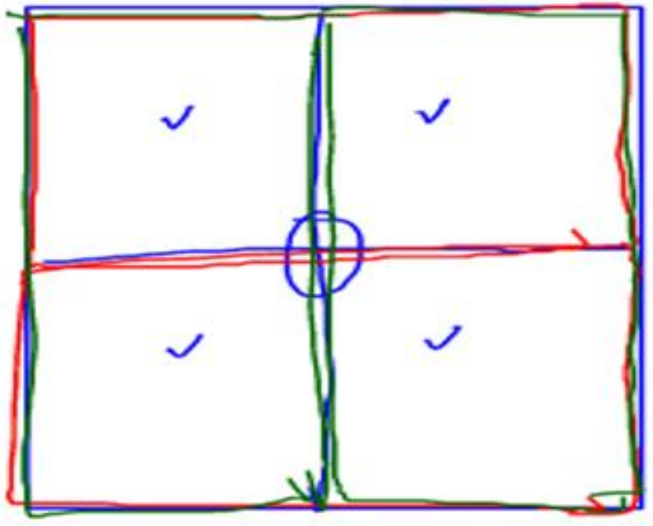
Square

✓ (1) All Squares are Rectangle

✗ (2) All Rectangle are Square



Rectangle.



Sq = 5 (4+1)

Rectangle = 5
+4
9

Those Rectangles which are not Square = 9 - 5 = (4)

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Ref Sq

$1^2+2^2+3^2 = 14$

	1	2	3
1	1		
2	2		
3	3		

1 1^3
t_8 2^3
t_{27} 3^3
36

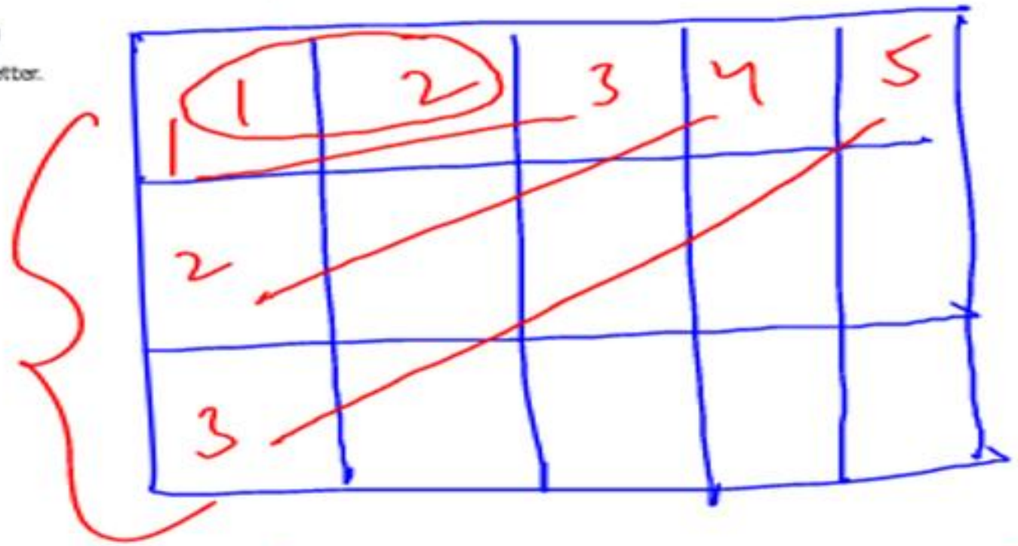
$$1^2+2^2+\cdots+n^2 = \frac{n(n+1)(2n+1)}{6}$$

$$= \frac{3\times\overset{7}{\cancel{4}}\times 7}{\cancel{42}} = 14$$

Ref $= 1^3+2^3+\cdots+n^3 = \left(\frac{n(n+1)}{2}\right)^2 = \left(\frac{3\times\overset{2}{\cancel{4}}}{\cancel{2}}\right)^2 = 6^2 = 36$

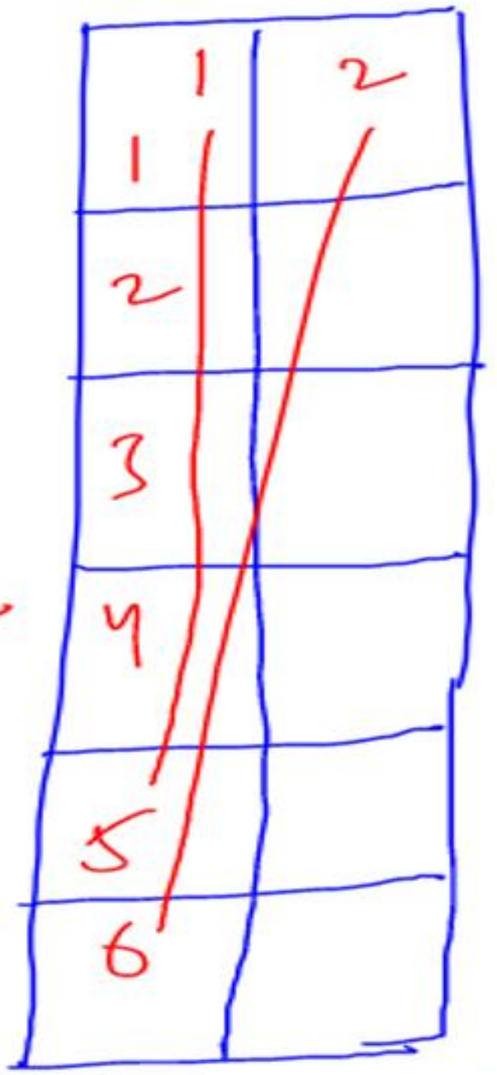
$\left(\frac{n(n+1)}{2}\right)\left(\frac{n(n+1)}{2}\right)$

$(1+2+\cdots+n)$ $(1+2+\cdots+n)$



Sq = 523 = 15
422 = 8
321 = 3
2659

Rect =
(1+2+3) x (1+2+3+4+5)
6 x 15 = 90



Sq = 226 = 12
125 = 5
17

Rectgle
(1+2) x (1+2+3+4+5+6)
3 x 21 = 63

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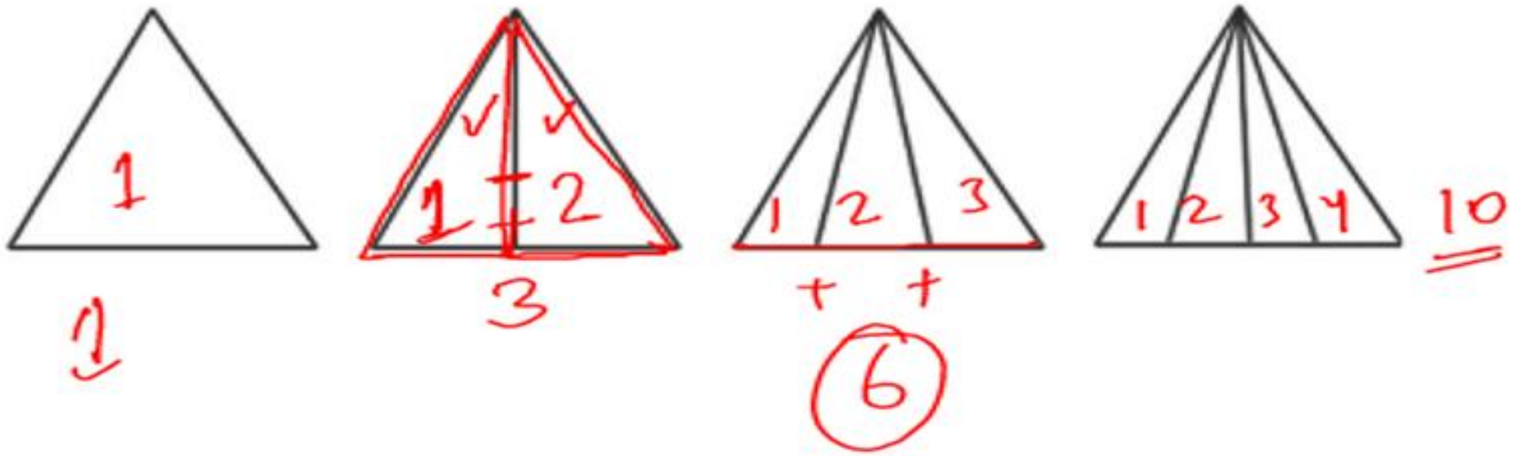
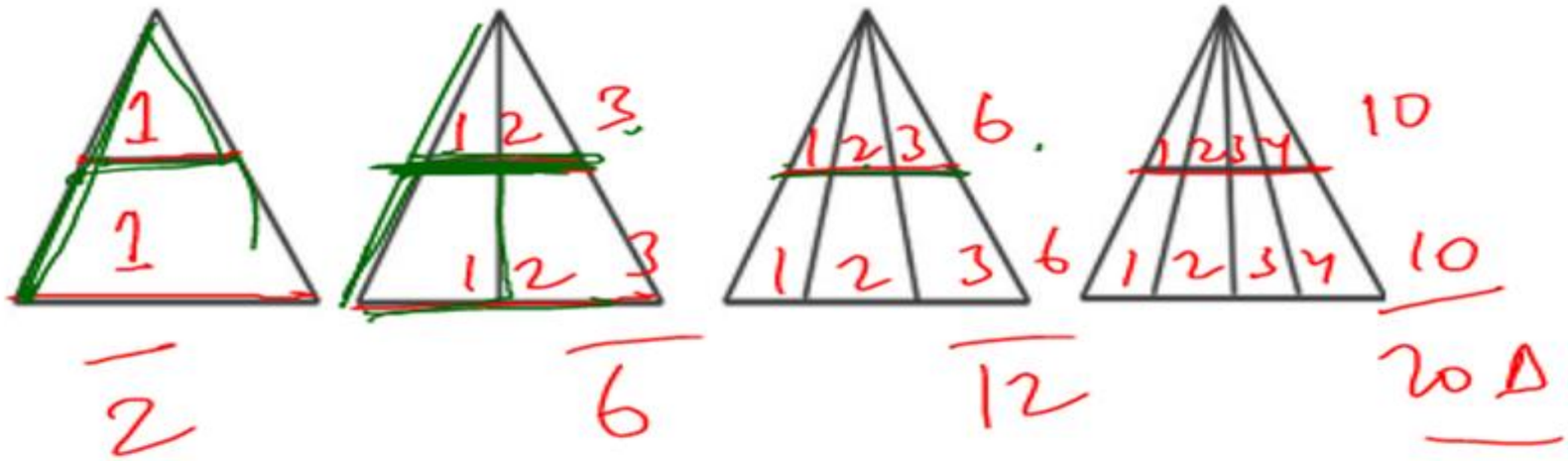
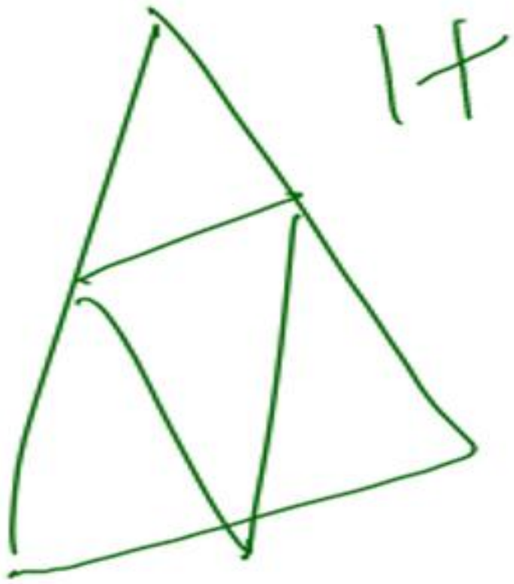
Triangle is the 1st polygon

$1+2+\cdots+n = \frac{n(n+1)}{2} = \frac{4\times5}{2} = 10$



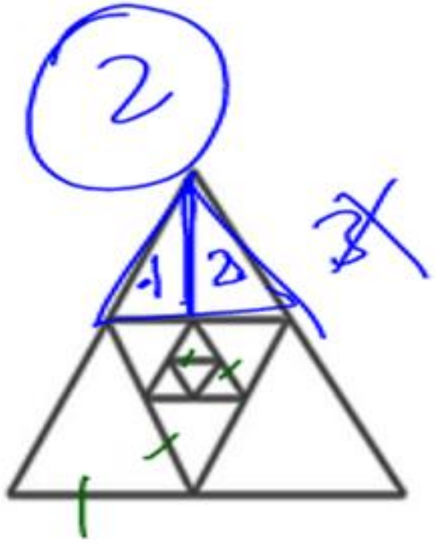




1+4=5D

1+4=5

1+4+4=9D



1+4+4+4=13

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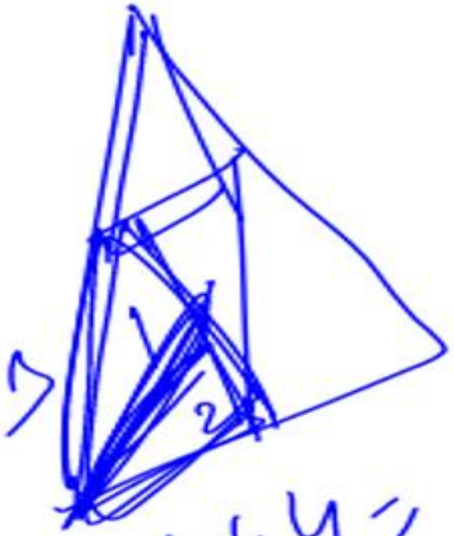
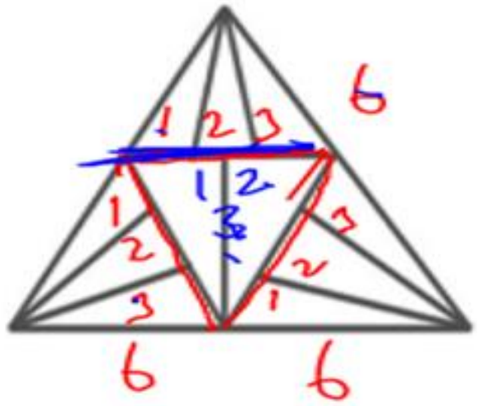
6+6+6+3+1+1 = 22

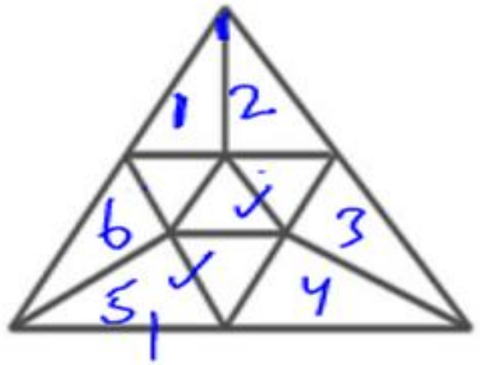
!

Edges



1+4=





1+4+4+6

15

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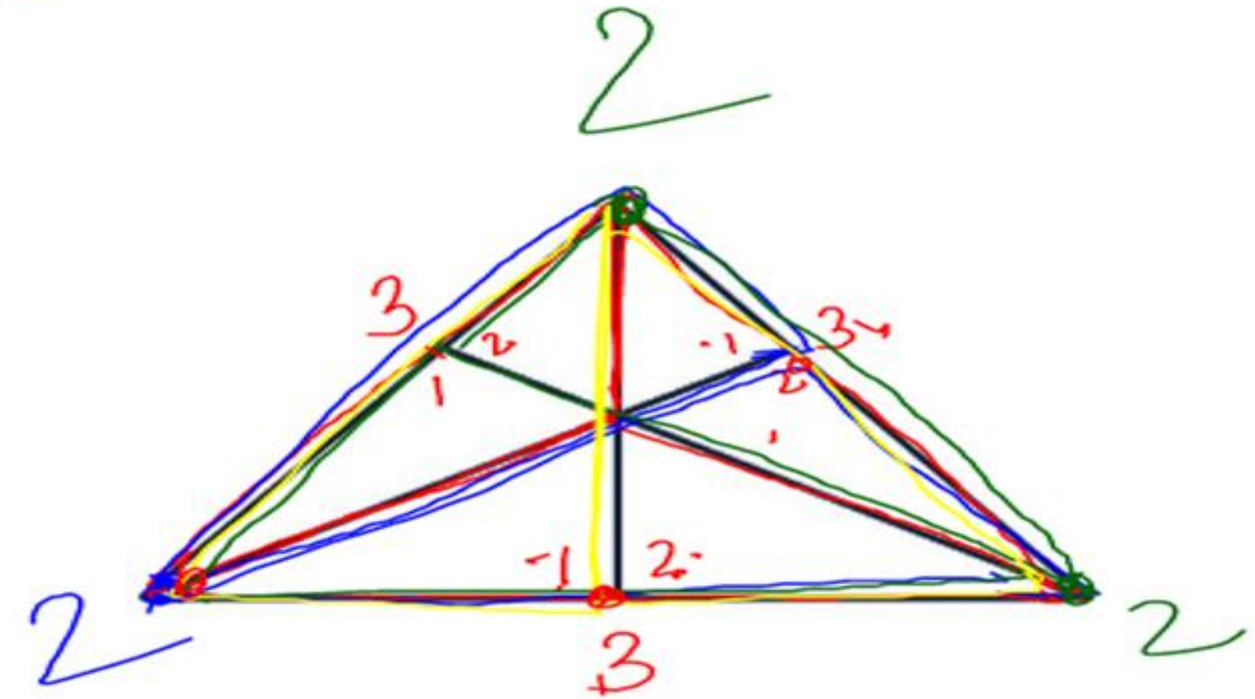
2p



3+3+3

2+2+2+1

16

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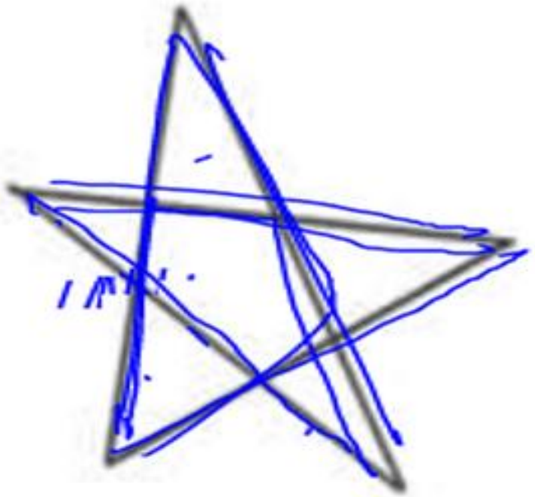
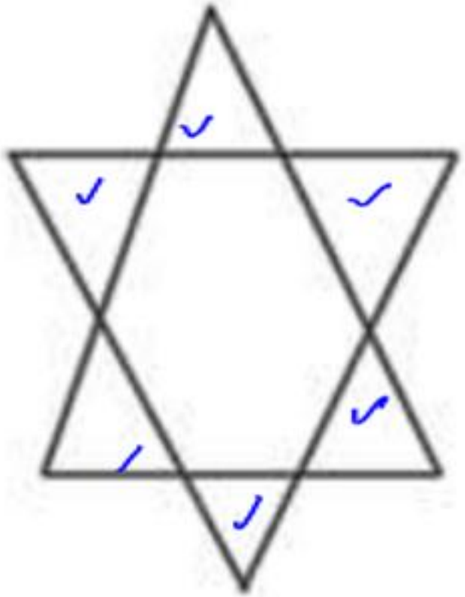
Shaktiman

5 + 5 = 10





6 + 2 = 8 △

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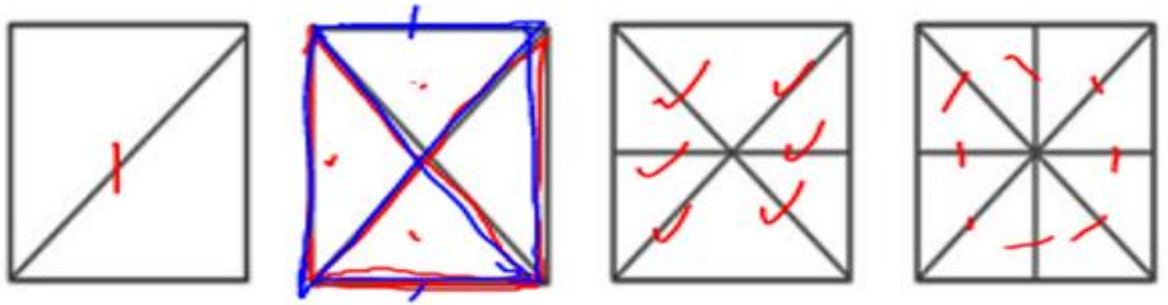
Trick

Line segment x2



4 x 2 = 8

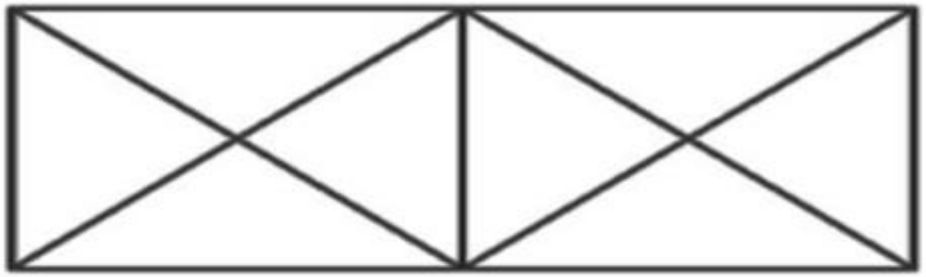
1 x 2 = 2

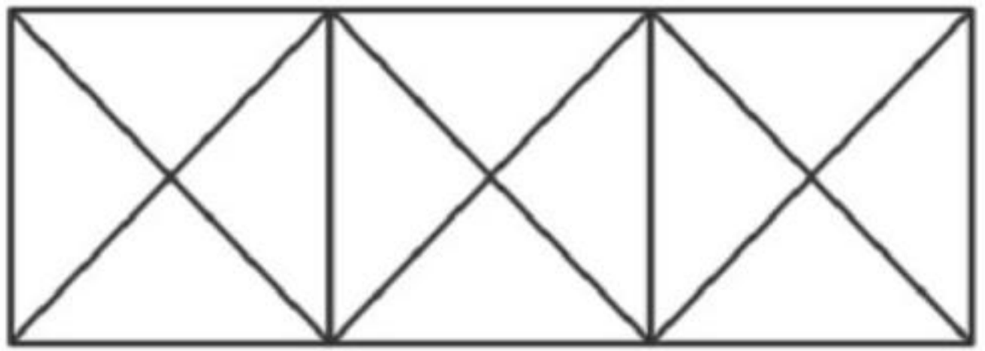
6 x 2 = 12

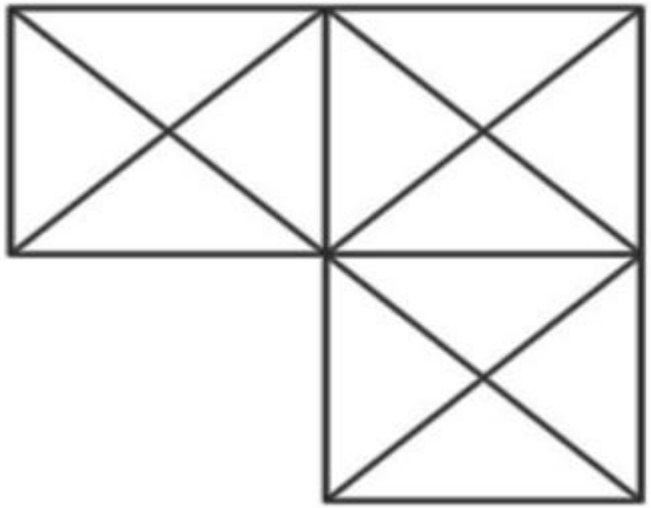
8 x 2 = 16

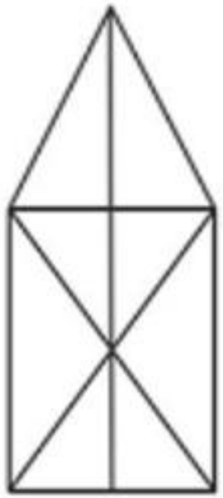
Single = 4

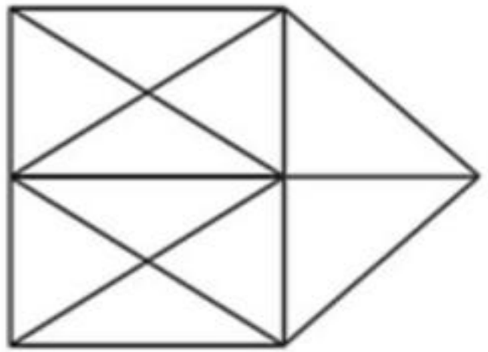
Double = 4 / 8







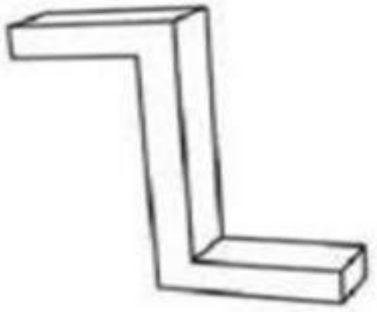




30

Q. How many surfaces are there in the given figure?

दी गई आकृति में कितने पृष्ठ (सतह) हैं?



A. 8

B. 10

C. 9

D. 7

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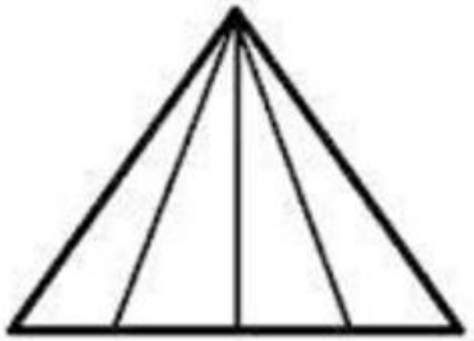
1. Find the number of the triangle from the given figure.



A. 11

B. 12

C. 10

D. 13

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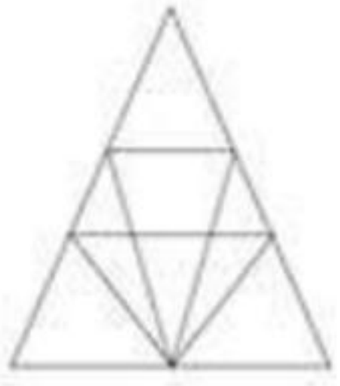
2. Find the number of triangles in the figure.



A. 12

B. 18

C. 22

D. 26

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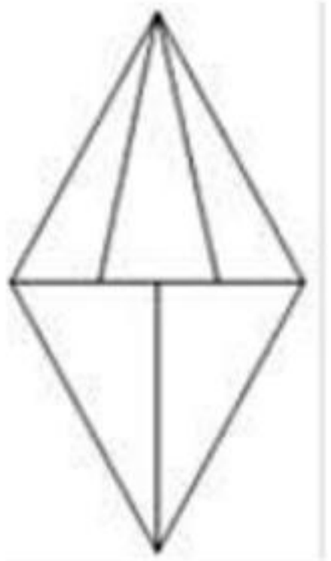
3. How many triangles are there in the given figure?



A. 8

B. 9

C. 10

D. 12

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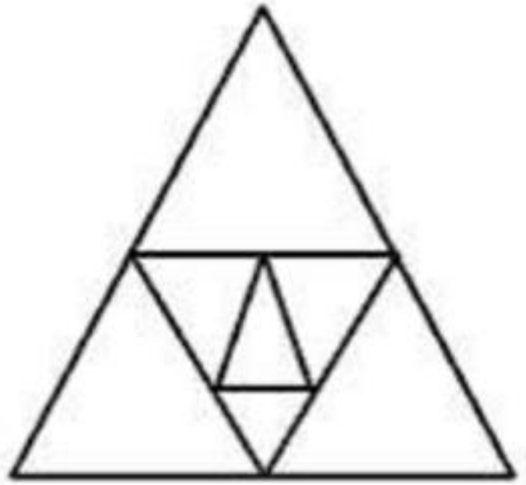
4. Find the number of triangles from the given figure.



A. 10

B. 9

C. 12

D. 11

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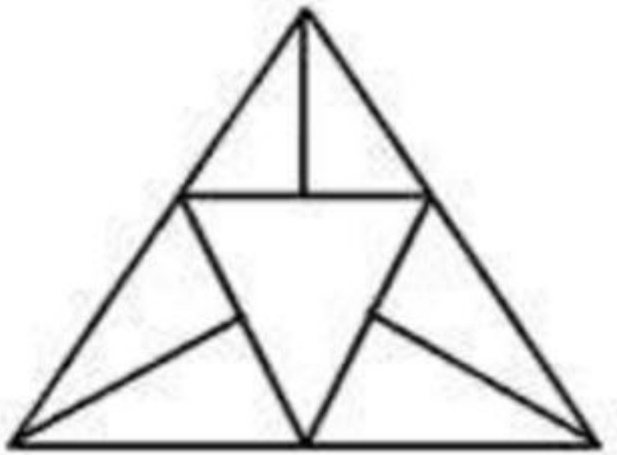
5. Find the number of triangles from the given figure.



A. 13

B. 12

C. 11

D. 14

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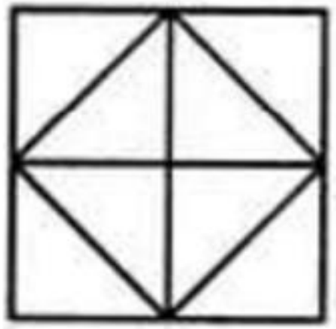
6. Find the number of triangles in the given figure.



A. 8

B. 10

C. 12

D. 14

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Reasoning with Kushal Bhaiya

Chapterwise previous yr Question Bank