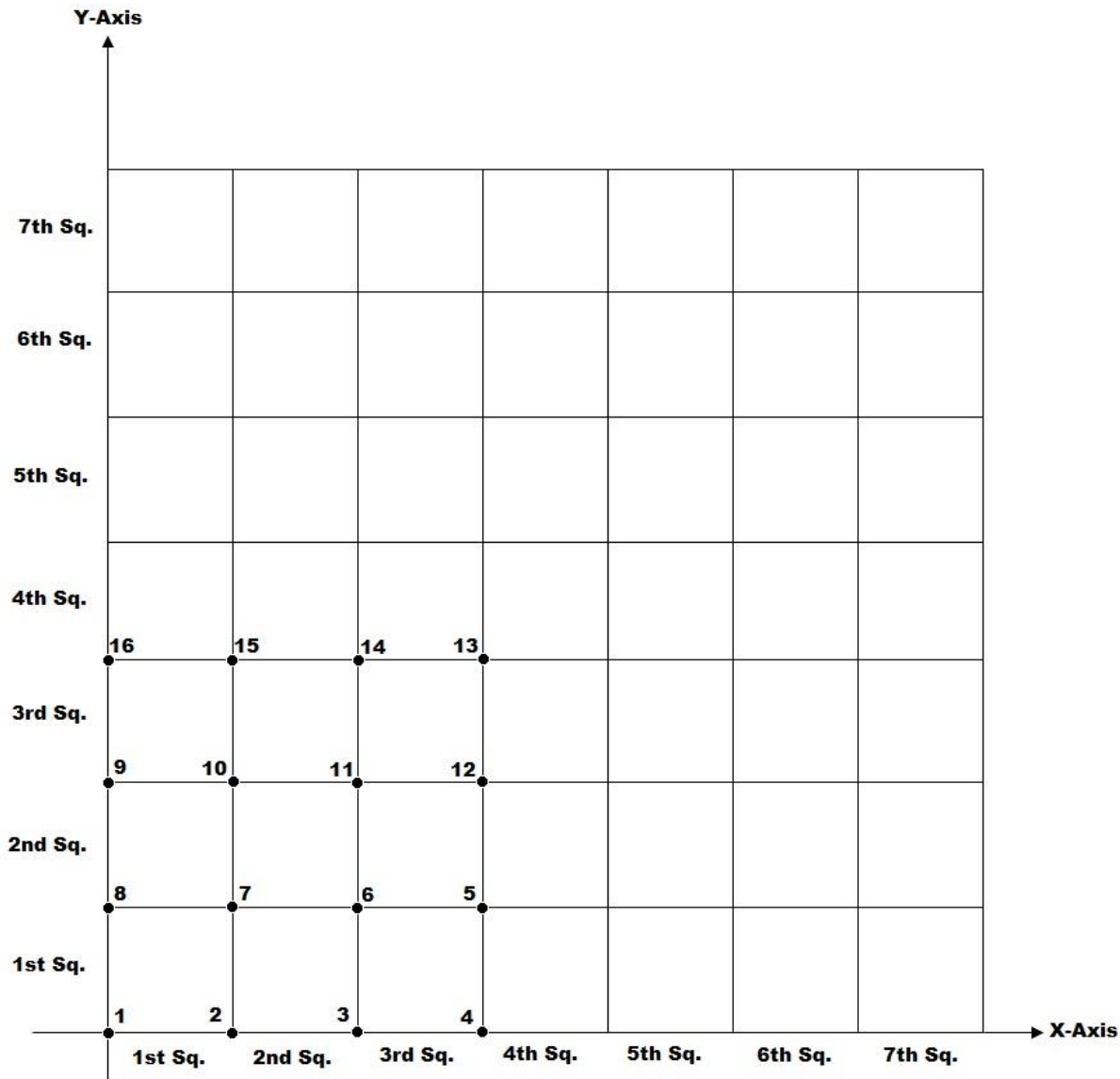# Square Through Squares

Squaring through points on Squares

A new formula is derived by Piyush Kumar Goyal known as "Square Through Squares".

Formula is mention below:

$$N^2 = [(N-2)^{th} \text{ Sq. on Y-Axis}] * [3^{rd} \text{ Sq. on X-Axis}] + [(N-3)^{th} \text{ Sq. on Y-Axis}] * [(N-3)^{th} \text{ Sq. on X-Axis}]$$

Y-Axis

7th Sq.						
6th Sq.						
5th Sq.						
4th Sq.						

16   15   14   13

3rd Sq.

9   10   11   12

2nd Sq.

8   7   6   5

1st Sq.

1   2   3   4

1st Sq.   2nd Sq.   3rd Sq.   4th Sq.   5th Sq.   6th Sq.   7th Sq.

X-Axis

Let's take some examples:

1. Square of 5

$5^2 = [(5-2)^{th}$ Sq. on Y-Axis$] * [3^{rd}$ Sq. on X-Axis$] + [(5-3)^{th}$ Sq. on Y-Axis$] * [(5-3)^{th}$ Sq. on X-Axis$]$

$= [3^{rd}$ Sq. on Y-Axis$] * [3^{rd}$ Sq. on X-Axis$] + [2^{nd}$ Sq. on Y-Axis$] * [2^{nd}$ Sq. on X-Axis$]$
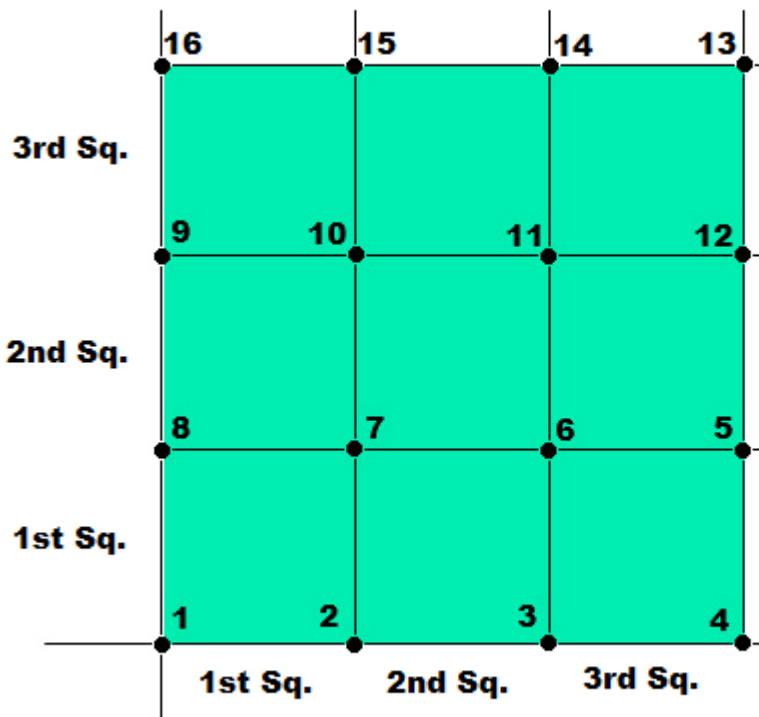
$5^2 = (3^{rd}$ Sq. $* 3^{rd}$ Sq.$) + (2^{nd}$ Sq. $* 2^{nd}$ Sq.$)$

= 16 points + 9 points

= 25 points

2.Square of 4

4^2 = [(4-2)th Sq. on Y-Axis] * [3rd Sq. on X-Axis] + [(4-3)th Sq. on Y-Axis] * [(4-3)th Sq. on X-Axis]
= [2nd Sq. on Y-Axis] * [3rd Sq. on X-Axis] + [1st Sq. on Y-Axis] * [1st Sq. on X-Axis]
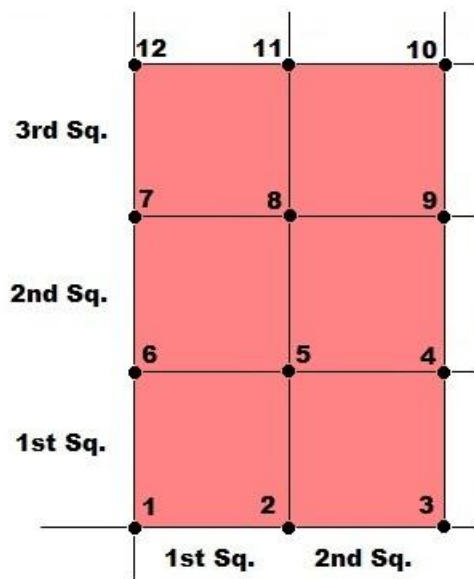
4^2 = (2nd Sq. * 3rd Sq.) + (1st Sq. * 1st Sq.)
= 12 points + 4 points
= 16 points

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