

# Written Test

## Sample (12)

Arrange the natural numbers as shown below:

	1 <sup>st</sup> column	2 <sup>nd</sup> column	3 <sup>rd</sup> column	4 <sup>th</sup> column	5 <sup>th</sup> column	...
1 <sup>st</sup> row	1	4	5	16	17	...
2 <sup>nd</sup> row	2	3	6	15	18	...
3 <sup>rd</sup> row	9	8	7	14	19	...
4 <sup>th</sup> row	10	11	12	13	20	...
5 <sup>th</sup> row	25	24	23	22	21	...
...	...	...	...	...	...	...

(a) Write down the 20<sup>th</sup> number of the 3<sup>rd</sup> row.

Answer: \_\_\_\_\_.

(b) Write down the 45<sup>th</sup> number of the 100<sup>th</sup> row.

Answer: \_\_\_\_\_.

(c) If  $T(1)$  represents the 1<sup>st</sup> number of 1<sup>st</sup> row,  $T(2)$  represents the 2<sup>nd</sup> number of 2<sup>nd</sup> row, and  $T(n)$  represents the  $n$ th number of the  $n$ th row, find the value of  $T(1) + T(2) + T(3) + \dots + T(15)$ .

Answer: \_\_\_\_\_.