

Magic Square

Creating a Magic Square for a given total

This is the basic 4 x 4 Magic Square

16	2	3	13
5	11	10	8
9	7	6	12
4	14	15	1

It can be memorized very easily by filling in the cells first

They are the cells numbered in order from top left being 1 and bottom right being 16 with the **diagonals left blank**

	2	3	
5			8
9			12
	14	15	

Then filling in the cells – which are now just the diagonals

These are again numbered in order but this time starting at the bottom right corner and working up to the top left

16			13
	11	10	
	7	6	
4			1

Combining these two squares gives a 4 x 4 Magic Square with the **total of 34** (the smallest total you can get)

In order to customize a Magic Square you can ask someone for any two-digit number between 34 and 75 (these parameters give a nice finished square)

You need to **subtract 34 from the number they give you**. Let us call this your secret number T.

Now, the cells with the enlarged bold numbers below are the important ones (They are the **even one-digit** numbers)

16	2	3	13
5	11	10	8
9	7	6	12
4	14	15	1

Your secret number T must be added to these four cells.

16	2+T	3	13
5	11	10	8+T
9	7	6+T	12
4+T	14	15	1

Example

So if the chosen number was 51 you would **subtract 34 from this** to get $T = 17$ and then **add 17** to the bold enlarged cells

16	2+17	3	13
5	11	10	8+17
9	7	6+17	12
4+17	14	15	1

Giving the following Magic Square with total 51

16	19	3	13
5	11	10	25
9	7	23	12
21	14	15	1