What's in a Name?



Have a look at these two squares of numbers:

1	5	7
3	8	2
4	9	6

8	4	7
6	1	2
5	9	3

What do you see? What is the same about the two squares? What is different?

'Magic' squares are square grids with a special arrangement of numbers in them. The arrangement is special because the numbers in each row, column and diagonal add up to the same total – the 'magic total'.

Looking at the left hand square above, if we add the top row of numbers, 1 + 5 + 7, we get a total of 13:

_1	5	7	— 1+5+7=13
3	8	2	
4	9	6	

If we add the left hand column of numbers, 1 + 3 + 4, we get a total of 8. So, we know already that this square is not a magic square as these two totals are different.

Use the numbers 1 to 9 to create a magic square. Can you find another way of doing it? And another? And another? What do you notice about your magic squares?