



Magic Squares

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
3	8	2
4	9	6

$1 + 5 + 7 = 13$

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?**