

# The Joy of Mathematics I

## Week 2

### Exercises

1) You might like to try a Killer Sudoku which is a little harder



Tricky – 3930, Monday 29th September, 2014

29				22	3	13		
15						25		
17	14		10	16	21	22		
	17	18				9		21
			7		14	6		
12							18	
21			27		9			4
					15			

2) The formula for the magic constant for a square size  $n$  is  $n(n^2 + 1) / 2$

Try making your own  $5 \times 5$  magic square (I gave you a clue). It should add up to  $5(5 \times 5 + 1) / 2 = 65$

Can you find anything about any other squares that add up to 65?

3) We looked at a five pointed magic star. Can you make a six pointed magic star?



