

The Joy of Mathematics I

Week 1

Exercises

- 1) If you have internet access please [register](http://www.samdenniss.com) at <http://www.samdenniss.com> - use the link at the bottom of the first page - this will give you access to the lecture slides, links and other materials as the course progresses. You will also be able to post comments, questions and items for discussion.
- 2) If you have never done ordinary Sudoku please find out how to do it - most newspapers explain the rules.
- 3) If you have done ordinary Sudoku then you might like to try this killer one - the rules are the same with the additional condition that each box must contain unique integers that add up to the total on the box, e.g. the first box has a total of 3 and must therefore contain 1 and 2.

THE  **TIMES**



Gentle – 3918, Monday 22nd September, 2014

3	10		6		11		22	
	21			5		12		
15		11	17		20	3		8
6						10		
13	23	13	4		22		13	
			9	17	12		4	3
						8		
16	8		14	3			17	11
	3			12				

- 4) We looked at writing a formula for the sum of the numbers 1,2,3,4...by arranging them in shapes, have a look at some other ways of doing this at

http://en.wikipedia.org/wiki/Polygonal_number#Triangular_numbers