

Challenge 2010 Long Task 2

Mystery Matrix

Have a look at this table square or matrix:

x	2	3	4	5
2	4	6	8	10
6	12	18	24	30
7	14	21	28	35
9	18	27	36	45

Can you see how it has been constructed?

You will notice that on the outside of the matrix, the numbers 2 to 9 are used to generate the numbers inside, and only one of these numbers is used twice (the 2).

1. Can you fill in the gaps below? [20 marks]

(The numbers 2 -12 were used around the outside of the matrix,

With, as before, just one number used twice.)

x						
	32			40		
					49	
			22			
		15				27
			24			
					42	