

Mr Brown Challenge Maths Day 3

I love this problem. I'm pretty sure my maths group have had this challenge but I don't think anyone completed it. It's a really good challenge and will keep you occupied for a good hour at least.

Read the instructions to get started and if you are desperate to find out the answer, you can look on [NRich](#) where you can see if you've gone right or you might need a bit of help.

20					30			
96		324						
					405			3
180								
				600		36		
		2835						
4								

Rules of Product Sudoku

Like a conventional Sudoku, this Product Sudoku has two basic rules:

1. Each column, row and 3×3 subgrid must have the numbers 1 to 9.
2. No column, row or subgrid can have two cells with the same number.

The puzzle can be solved with the help of the numbers in the top parts of certain cells. These numbers are the products of the digits in all the cells horizontally and vertically adjacent to the cell.

A Short Demonstration

The cell in the top left corner of this Sudoku contains the number 20. 20 is the product of the digits in the two adjacent cells, which therefore must contain the digits 4 and 5. The 5 cannot go in the cell below the top left hand corner because 5 is not a factor of 96 (the product shown in the third cell down on the left hand side of the puzzle). Therefore 5 must be entered into the cell to the right of the cell containing 20 and 4 in the cell below.