Task One

Look at a 1 to 100 square. You are going to choose a 3 by 3 section from the 1 to 100 square.

Copy the diagram on the right and fill in the numbers from your chosen 3 by 3 square.

You are going to do some calculations using your square.

First take the numbers indicated on the left. Add them together.

Now try the two numbers indicated on the right.

And finally take these two numbers and add them together.

Now find two other numbers from your square which add to give the same total.

Task Two

* Choose two more 3 by 3 squares and repeat Task One for each of them.
* What do you notice about the results for each of your three squares?
* Explain why this happens.
* What is the connection between the centre number of each square and the totals?

Task Three

* Choose a 4 by 4 square from the 100 square. Experiment to find how many pairs of numbers will give the same total this time. Show all your working.