## Multiplication Squares Challenge

Can you work out the numbers that need to go into the squares so that when you multiply the rows and columns you get the products shown?

You can only use the numbers 1-9 and you can only use the numbers once in each grid.

|  |  | 18 |
| :---: | :---: | :---: |
|  |  | 28 |
| 12 | 42 | 8 |


|  |  | 36 |
| :---: | :---: | :---: |
|  |  | 40 |
| 32 | 45 | 1 |


|  |  | 63 |
| :---: | :---: | :---: |
|  |  | 24 |
| 21 | 72 | 6 |


|  |  | 12 |
| :--- | :--- | :--- |
|  |  | 48 |
| 24 | 24 | 12 |


|  |  | 45 |
| :---: | :---: | :---: |
|  |  | 12 |
| 18 | 30 | 9 |


|  |  | 48 |
| :---: | :---: | :---: |
|  |  | 63 |
| 42 | 72 | 3 |

EXTRA: The numbers in red show the difference between the sums of the products in the third row and the third column.

Can you make another grid that has a difference of 1? What is the biggest difference you can make?

Is it possible for there to be a difference of zero? If not can you explain why not?

