

Gabriel wrote the numbers 1-9 in a 3x3 grid.

He then multiplied together all the numbers in each row and wrote the resulting product next to that row.

He also multiplied the numbers in each column together, and wrote the product under that column.

He then rubbed out the numbers 1-9.

| | | | |
|----|----|-----|-----|
| | | | 24 |
| | | | 40 |
| | | | 378 |
| 60 | 21 | 288 | |

Can you work out where Gabriel placed the numbers 1-9?

Did you have more information than you needed?

Can you fill these grids? One of them has more than one solution:

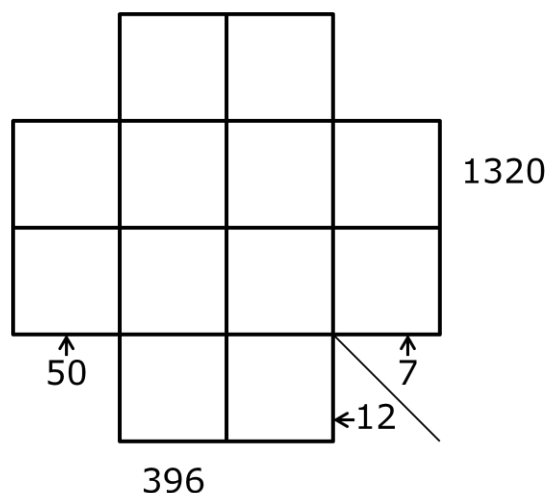
| | | | |
|----|----|-----|-----|
| | | | 24 |
| | | | 120 |
| | | | 126 |
| 24 | 72 | 210 | |

| | | | |
|----|----|--|-----|
| | | | 28 |
| | | | 144 |
| | | | 90 |
| 40 | 48 | | |

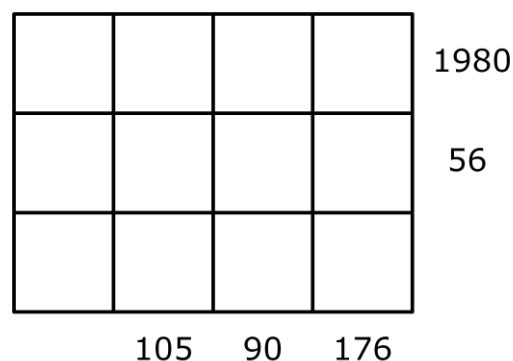
For this grid, Gabriel used the numbers 1, 2, 3, 4, 5, 6, 9, 10 and 12.

| | | | |
|----|-----|--|----|
| | | | 12 |
| | | | 60 |
| | | | |
| 20 | 135 | | |

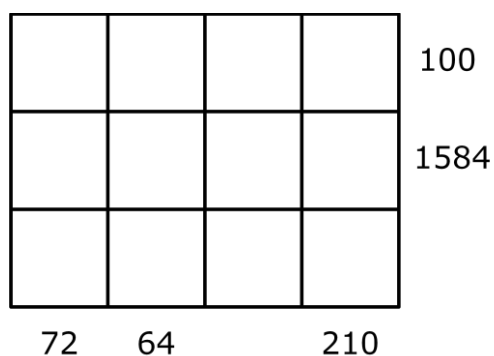
Can you work out where to place the numbers **1-12** in this grid?



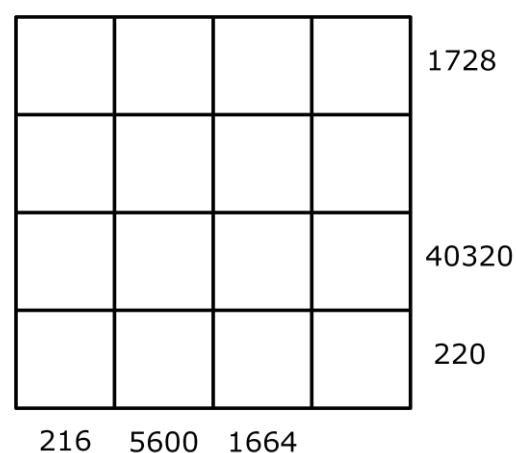
Can you work out where to place the numbers **1-12** in this grid?



Can you work out where to place the numbers **1-12** in this grid?



Can you work out where to place the numbers **1-16** in this grid?



What features of a grid make it easier or harder to solve?

Extension

Gabriel used the numbers 1, 2, 3, 4, 6, 8, 9, 12 and 16 to make this grid.

How many solutions can you find?

Is this diagram easier or harder to complete than the ones above? Why?

