**Magic Squares**

In a Magic Square, every row, column and diagonal all add up to make the same total.

In a traditional 3 by 3 magic square, the digits 1 to 9 are used to make totals of 15, like the one below. Each digit can only be used once.



However, other totals can be used and larger grids – for example 4 by 4 or 5 by 5.

Below are some different magic squares. See if you can complete them!

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **8** | **1** |  |  |  | **9** | **2** |
|  | **5** | **7** |  |  |  |  |
| **4** |  | **2** |  | **8** |  |  |
| **8** |  |  |  | **4** |  |  |
| **1** | **5** |  |  |  | **5** | **7** |
|  | **7** |  |  |  | **1** |  |

For these puzzles use the numbers 1-16 to complete the puzzle. Your rows, columns and diagonals should add to 34.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **11** |  | **5** |  | **7** |  | **9** |  |
| **6** | **13** | **12** |  |  |  | **11** |  | **16** |
|  |  | **7** |  |  |  | **6** |  |  |
| **15** |  |  | **10** |  |  | **13** | **8** | **1** |

Can you come up with your own magic square for us to solve?