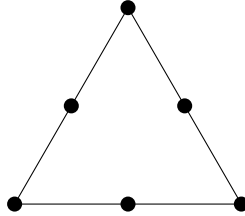


Problem 1

Can you place the numbers 1 through 6 on the 6 dots so that the sum along each of the three sides is the same? How many ways are there to do this?



Problem 2

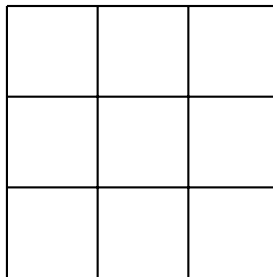
What if instead of $\{1, 2, 3, 4, 5, 6\}$, we use $\{7, 8, 9, 10, 11, 12\}$?

Problem 3

What if (using $\{1, 2, 3, 4, 5, 6\}$), we take the product along each of the three sides instead?

Problem 4

Can you place the numbers 1 through 9 in the 9 squares so that the sum of each row, column, and diagonal is the same? How many ways are there to do this?



Problem 5

Can you place the numbers 1 through 6 in a 2×3 grid so that the sum of each row and column is the same? How many ways are there to do this? What about the numbers 1 through 12 on a 3×4 grid? What about the numbers 1 through 20 on a 4×5 grid?