In the enchanted **Kingdom of Arithmetica**, tales were often told of a mysterious number (an integer) known only to the royal mathematicians. According to ancient scrolls, this number held a curious property:

*If you raise it to the power of **2025** (the founding year of the New Order) and then add two, the result would match exactly the square of the number of ways to divide twice as many council members into two equal groups.*

The Oracle of Numbers declared that such a solution, if it existed, would reveal a deep truth hidden in the very fabric of the kingdom.

The King, intrigued by this ancient riddle, has announced a grand reward to anyone who can find such a number, or prove that the legend is but a beautiful myth. Can you solve the riddle of Arithmetica?