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Chess and mathematics are closely related
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[Some Things You May Not Know About Chess](#)

Chess and mathematics are intimately related

When it comes to chess, most people see themselves as falling into the category labeled "I have some skill, I may even beat my neighbors or my little niece, but I'm not really a grandmaster." The last part is perhaps even more true, when it comes to maths. Well, to prove this to you beyond doubt, here's a couple of [facts](#) that will show you how chess and maths are related and, most likely, that there are still many things you don't know about either of them.

We're not going to provide a list of the top Russian Olympic winners, but speak about the beginnings of the sport instead. According to the legend, the basics of the game were developed by an Indian mathematician, and soon the game was very appreciated and famous. Everybody - including the King of India - was playing it. In fact, the King liked it so much that he summoned the mathematician in order to offer him a prize - any prize - for his feat.

So as not to seem greedy, he only asked that he was payed in rice grains placed according to the chessboard squares: one for the first, 2 for the second, 4 for the third, and so on, doubling with each new square. There were only 64 squares, so how hard could that be to pay him, surely the King (and maybe you) thought. However, by the 16th square there was already a kilogram of rice and 16 kilos at the 20th. The last square was never reached, but if the King could afford it, it would have summed 18,446,744,073,709,551,615 grains.

The second fact involves the total number of possible chess games expressed in chessboards. So, the mathematicians said, if we were to line up chessboards in a line that would stretch from one end of the observable universe to the other end, the number of chessboards would be somewhere in the 28 digits. Yet, that's only about a fifth of the total calculated chess game possibilities, which rise to approximately 10¹²⁰ (1 followed by 120 zeros). Hopefully, this indicator of the complexity and uniqueness of each chess game will rather attract than deter you from playing it.