



CHESS WORKSHOP IES JARDÍN DE MÁLAGA

The legend of chess and the rice grain

How Doubling Makes Numbers Grow

There's a famous legend about the origin of chess that goes like this.

The king was a big chess enthusiast and had the habit of challenging wise visitors to a game of chess. One day a traveling wise man was challenged by the king. To motivate his opponent the king offered any reward that the wise man could name.

The wise man modestly asked just for a few grains of rice in the following manner: the king was to put a single grain of rice on the first chess square and double it on every consequent one.

Having lost the game and being a man of his word the king ordered a bag of rice to be brought to the chess board. Then he started placing rice grains according to the arrangement: 1 grain on the first square, 2 on the second, 4 on the third, 8 on the fourth and so on:

How Much Rice?

We are all like the emperor in some ways - we find it hard to understand how fast functions like "doubling" makes numbers grow - these functions are called "exponential functions" and are actually found everywhere around us - in compound interest, inflation, moldy bread and populations of rabbits.

