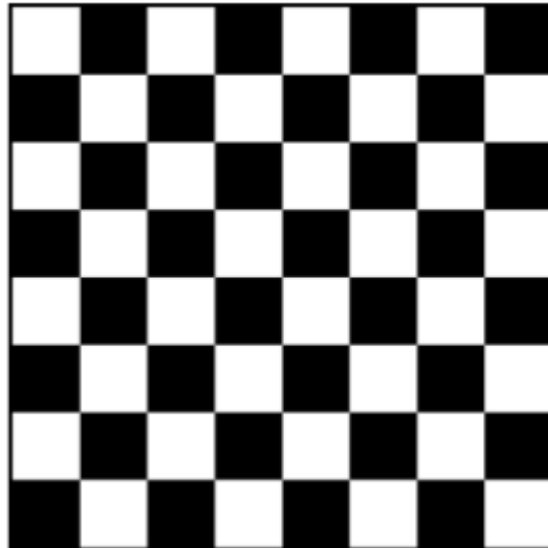


December 27<sup>th</sup>

How many squares, in total, can be found on a chess board?



There are 8 sizes of square

1 is 8x8, 4 are 7x7, 9 are 6x6 etc, up to 64 are 1x1

So there are

$$1 + 4 + 9 + 16 + \dots + 64 =$$

$$\sum_{n=1}^8 n^2 = \frac{1}{6} \times 8 \times 9 \times 17 =$$

**204 squares** in total