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Regulars



Puzzle page



Square tactics



How many squares are there on a chessboard? (In total – we're not asking you just to count the 64 single black and white squares!)

The solution

Once you think about this puzzle in the right way, it's not hard at all.

- There is one square that is the full size of the chessboard.
- There are 4 squares with sidelength one unit less than this (taking a single square of the chessboard as having one unit length).
- There are 9 squares with sidelength one unit less again, ie with sidelength 6 units.

Puzzle page

- In general, there are n^2 squares of sidelength $[8-(n-1)]$.

Adding all these numbers, for n between 1 and 8, we see that there are

$$1 + 4 + 9 + 16 + 25 + \dots + 64 = 204$$

squares in total on the chessboard.

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