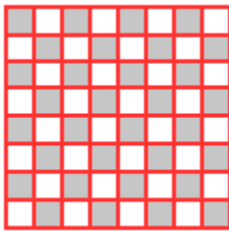# QUESTION:
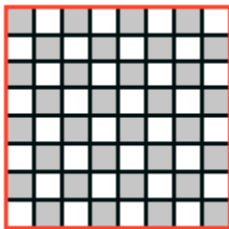
A chessboard is 8 squares by 8 squares. How many squares are there on a chessboard? (clue: it's not 64!)
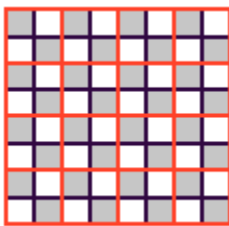
ANSWER:

- The diagram below shows that there are indeed 64 squares, you there are also some more...

- Don't forget the one large square (shown in red here)...

- And, also the 16 two-by-two squares shown below (although these aren't the only 2x2 squares!)...

- There are many more different-sized squares on the chessboard.

The complete list of answers is shown below:

1, 8x8 square
4, 7x7 squares
9, 6x6 squares
16, 5x5 squares
25, 4x4 squares
36, 3x3 squares
49, 2x2 squares
64, 1x1 squares

Therefore, there are actually 64 + 49 + 36 + 25 + 16 + 9 + 4 + 1 squares on a chessboard! (in total 204).