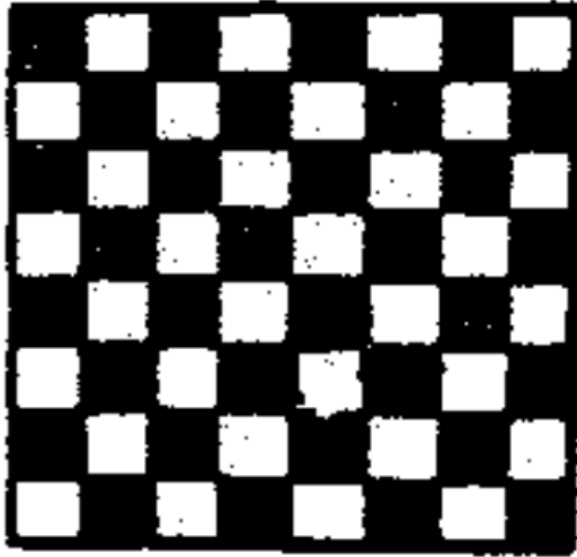


## Checkerboard Squares



**On the checkerboard shown above:**

1. Find as many squares as you can. How many did you find?
2. Find the total number of squares on the board. Explain why you know you have found all of them.
3. Describe how you could find the total number of squares on any size board, not just an 8x8 board.
4. Describe how you could find the total number of squares on a rectangular board of any dimensions.
5. Develop an algebraic formula to find the maximum number of squares on both a square board (An  $n \times n$  board) and a rectangular board (an  $m \times n$  board).