Problem 1

No hint.

Problem 2

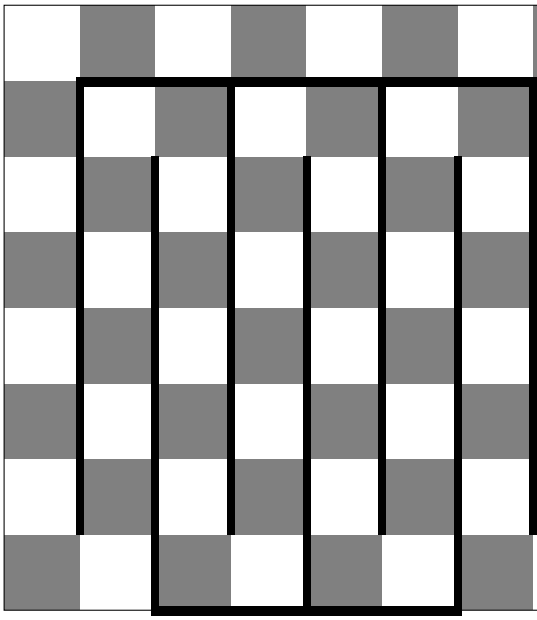
When a square's been removed, the number of remaining squares is odd.

Problem 3

Start by covering the chessboard as simply as you can, then chose two adjacent squares to remove and see whaty you can do.

Problem 4

Considered the chessboard as a closed path, following this figure :



Problem 5

Two arbitrary pairs of squares of different colors have been removed from a chessboard. Is it always possible to cover the remaining portion of the board with dominoes?

Problem 6

Three arbitrary pairs of squares of different colors have been removed from a chessboard, so that the chessboard does not split into two or more separate pieces. Is it always possible to cover the remaining portion of the board with dominoes?

Problem 7

A domino has two edges, a long edge and a short edge. Two adjacent dominoes must be in one of the only three possible configurations : long edge to long edge, short edge to short edge and long edge to short edge.
In a domino tiling of a chessboard, what is the minimum number of long-edge to long-edge pairs ?

Problem 8

Prove that in any cover of a whole chessboard with dominoes, the number of horizontal dominoes with a black left square and the number of horizontal dominoes with a white left square are equal.