

A g4-g8 chess conundrum

from George Bell (gibell@comcast.net)

Instructions: Cut out the square tetromino at the bottom of this page and the twelve pentominos on the next page along the dotted lines. To avoid cutting up this book, download a printable version of this puzzle at the link below.













Puzzle #1: Assemble the 13 pieces into a valid chess position where **black is checkmated**. Hint: the winning move for white was, naturally, g4-g8.

Puzzle #2: Assemble the 13 pieces into a (completely different) valid chess position where **white is checkmated**. Hint: the winning move was f5-g3.

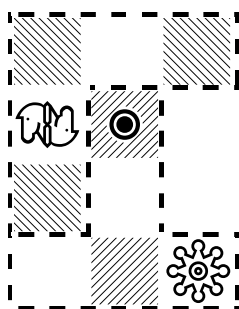
The solutions are unique! See them at <http://www.geocities.com/gibell.geo/g4g8>

Clarifications:

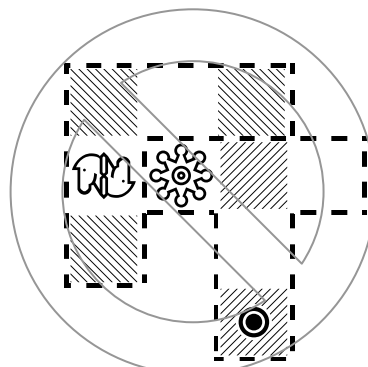
1. What is a “valid chess position”? It is a board position that could appear during a chess game. There can be no pawns on ranks 1 or 8. Both kings cannot be in check. From the perspective of either player, the square in the lower right corner (h1) must be white. Standard chess notation is from white’s perspective, with columns (files) labeled a to h, left to right, and rows (ranks) 1 to 8, bottom to top.
2. Can the pieces be turned over? No. They are printed on one side only!
3. A special, rotationally symmetric chess font has been used, courtesy of Gary Katch at <http://alcor.concordia.ca/~gpkatch/>

	King	Queen	Rook	Bishop	Knight	Pawn
White						
Black						

4. A chess board must be properly checkered! The orientation of the diagonal lines marking the dark squares of the chess board is NOT significant. Below are two diagrams showing legal and illegal assembly of pieces:



Legal



Illegal checkering

