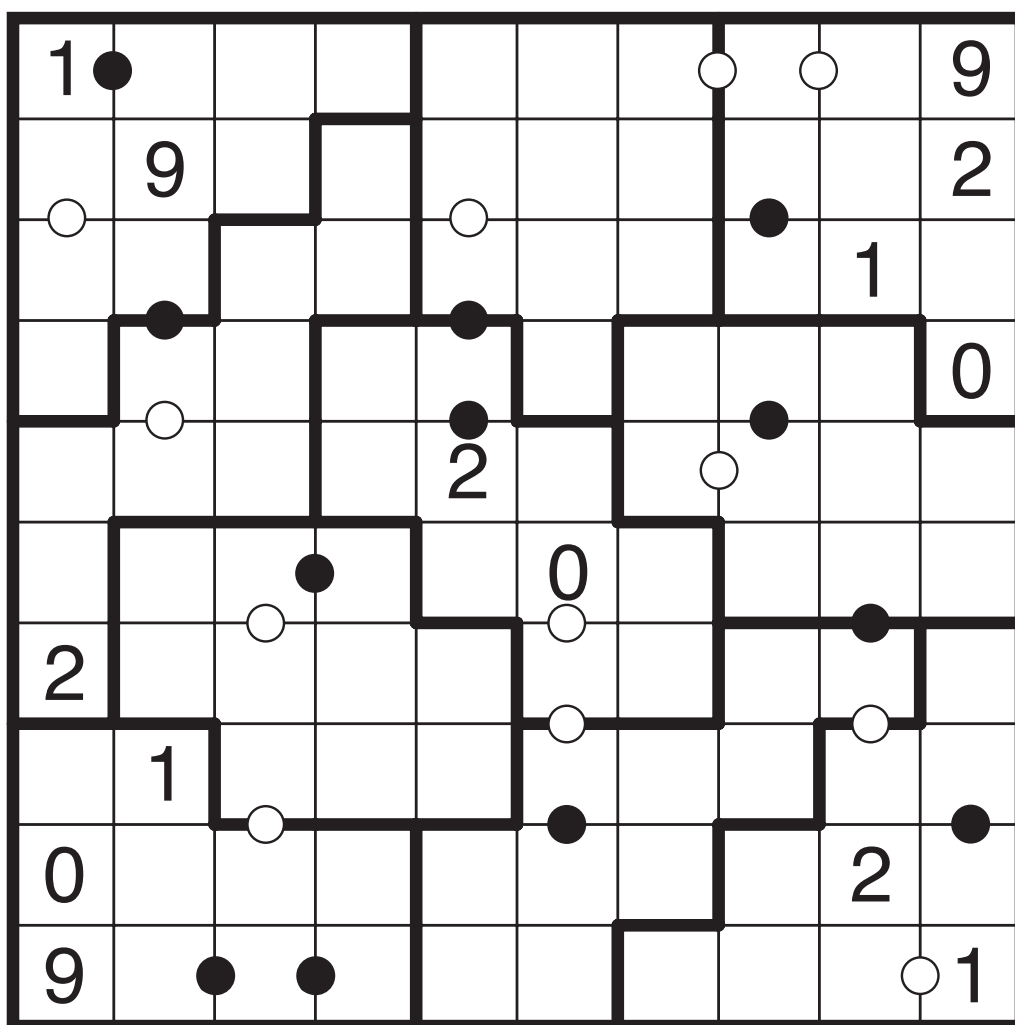# Irregular 0-9 Kropki Pairs Sudoku by Philip Newman

Rules: Variation of Sudoku rules (insert a number from 0 to 9 into each cell so that no number repeats in any row, column, or bold region). If a white circle is given between two adjacent cells, then the two numbers in those cells must differ by 1. If a black circle is given between two adjacent cells, then the two numbers must have a ratio of 2. Pairs of cells without circles can have any relationship.

Short Day, Long Puzzle