Problem of the Week Solution Three

The problem is to determine how the white queen can force the black king to move to the square d3, in no more than four moves. (Note that, for the purposes of this problem, the chessboard has dimensions 4×3 .)



Here is the only sequence that works: 1. Qa2 Kc1 2. Qb3 Kd2 3. Qb1 Kc3 4. Qa2 Kd3. The following four diagrams show the positions after each pair of moves:



It is interesting to note that after each white move, black only had one legal reply. Also interesting, and surprising, is the fact that at no point does the white queen move a square from which she can "see" the black king. (In more standard chess terminology, at no point does the white queen place the black king in check.