

Marked-man problems on a 4×4 board with diagonal moves

JDB, 22 January 2023

In *The Delights of Peg Solitaire*, I give as an example the solving of the a1 reversal on the 4×4 square board with diagonal moves with a “go there and stay” triangular loop (Figures 11.7 to 11.9 in the book). There are more problems of the same kind. The a1 and b1 reversals can be solved with “go there and stay” square loops (Figures 1 and 2 below), and the b2 reversal not only with a “go-there-and-say” square loop but also with a man-on-the-watch five-sweep (Figure 3).

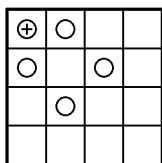


Figure 1
(start c3-a1)

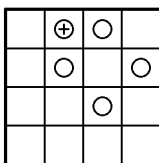


Figure 2
(start d3-b1)

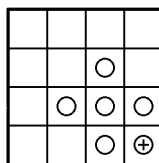


Figure 3
(vacate b2)

Additionally, it is possible to solve the a1 reversal with a man on the watch at c3, though not with a finale longer than a one-sweep.

Specimen solutions on the next page.

Specimen solutions

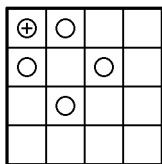


Figure 1
(start c3-a1)

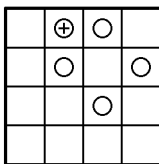


Figure 2
(start d3-b1)

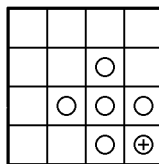


Figure 3
(vacate b2)

To reach Figure 1 having vacated a1 and marked c3, play **c3-a1**, b4-b2, b1-b3, d4-b4-b2, d1-b3, d3-d1-b1, a2-c2, a4-a2.

To reach Figure 2 having vacated b1 and marked d3, play **d3-b1**, c4-c2, a4-c4, d4-b4, a2-c4-a4-a2, d1-b3, a1-a3-c3.

To solve the b2 reversal with a “go-there-and-stay” square loop having marked d4, play **d4-b2** and then repeat the moves of Figure 1 reflected in the diagonal d1...a4. To reach Figure 3, play d2-b2, c4-c2, c1-c3, a4-c2, a1-c1, d1-b1-b3, a2-a4-c4.

To solve the a1 reversal with a man on the watch at c3, play c1-a1, d3-b1, a1-c1, a2-c2, d1-b1-d3, a4-c2, d2-b2, c4-a4-a2-c2, d4-d2-b2, **c3-a1**.

Please tell me if these problems have already appeared elsewhere.