Puzzle in Place 2020

June 22: Grid cycles

The Rules

Connect the dots with horizontal and vertical line segments to create a single loop without crossings or branches (this might be called a *rectilinear planar cycle* in *graph theory*), subject to the following conditions:

- The loop must pass through all of the black and white circles.
- At a black circle, the loop must turn left or right.
- At a white circle, the loop can not turn.
- The number in each circle indicates the sum of the lengths of the two straight lines emanating from that circle.

See the second page for an example.



Send solutions to mathcschair@obu.edu by July 6

Puzzle in Place 2020

Here's an example of a puzzle and its solution:



