

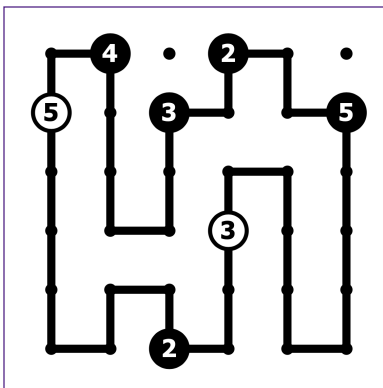
## June 22: Grid cycles - *SOLUTIONS!*

### The Rules

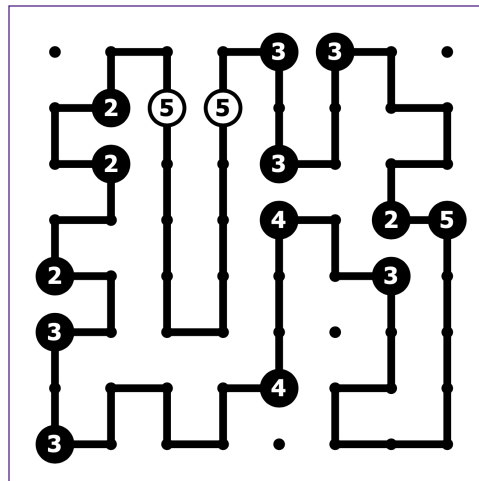
Connect the dots with horizontal and vertical line segments to create a single loop without crossings or branches (this might be called a *rectilinear planar cycle* in *graph theory*), subject to the following conditions:

- 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.

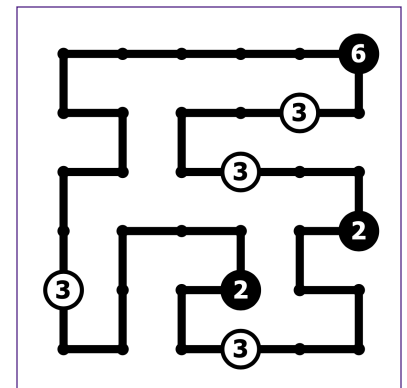
Puzzle 1



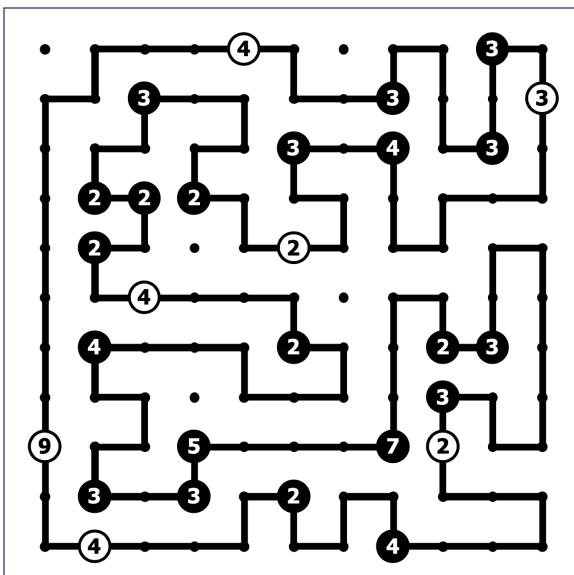
Puzzle 3



Puzzle 2



Puzzle 4



Puzzle 5

