MOMATH
NATIONAL MUSEUM OF MATHEMATICS
momath.org

Color the States

Print and Play!
March
Year of Math 2026

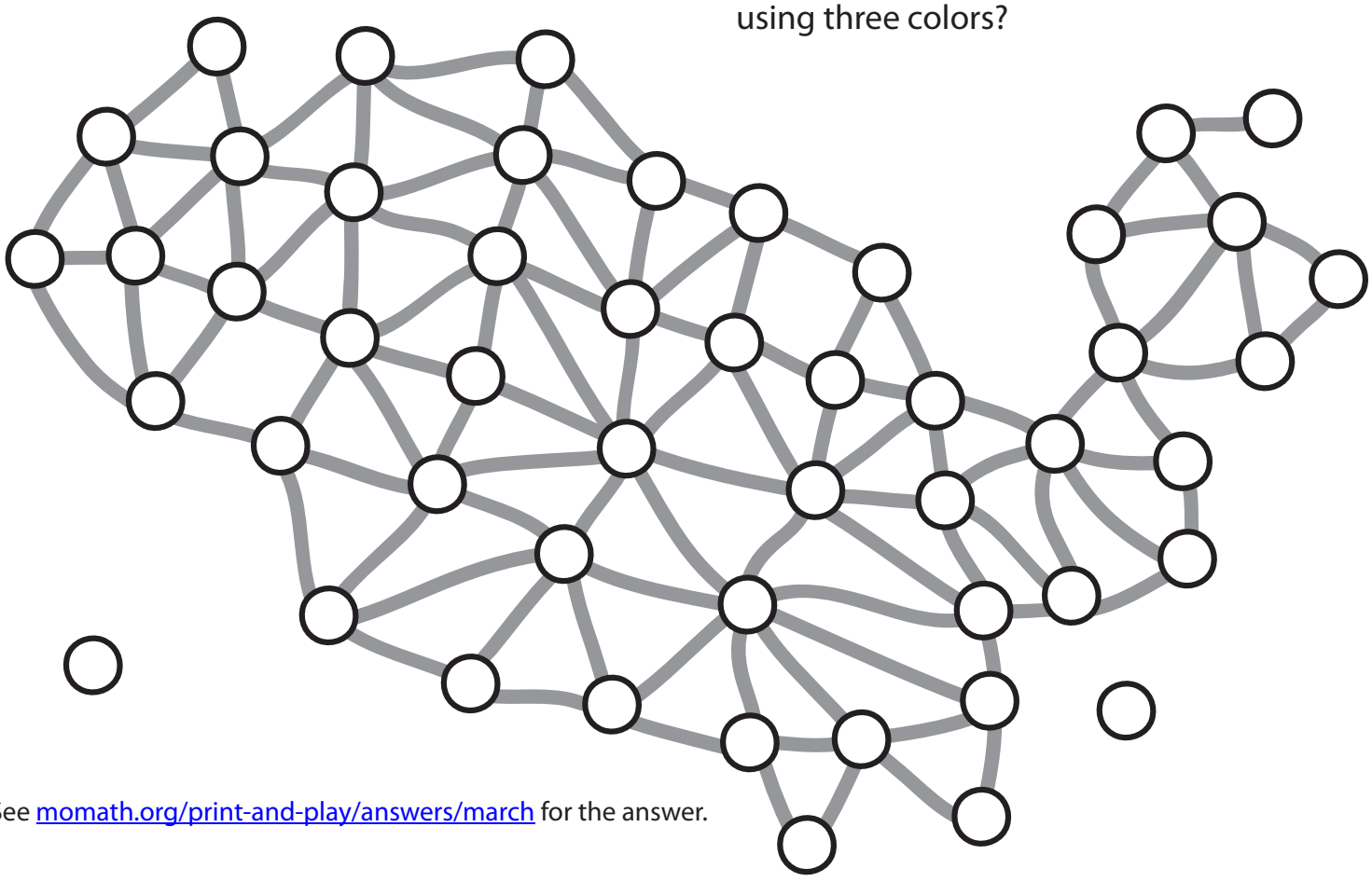
With four colors, you can color a map of the United States so that adjacent states are always colored with different colors.

Can you color the map so that adjacent states are colored differently, but only using three colors?

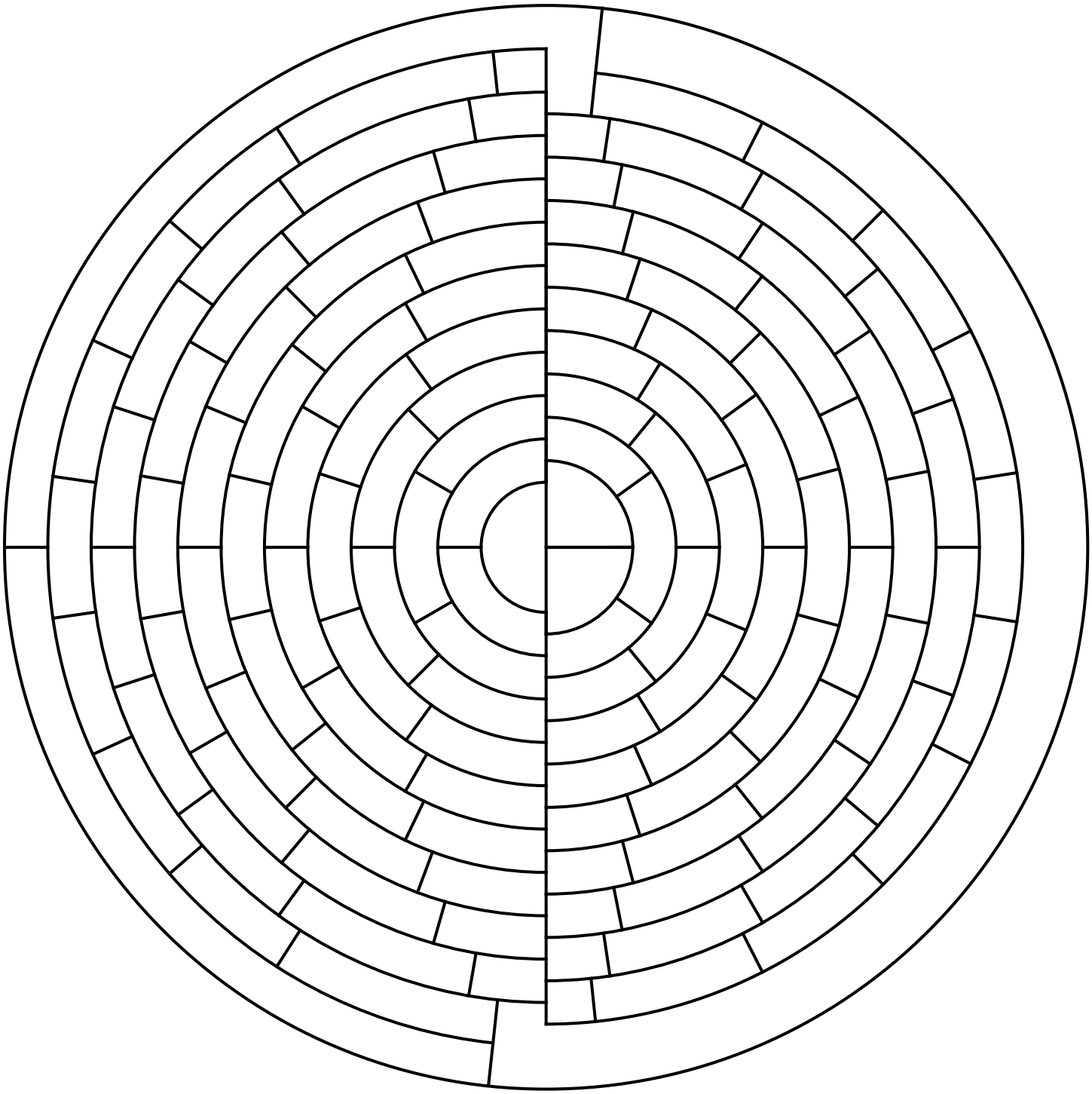
We can simplify this problem by representing each state as a node and drawing a connection between nodes representing adjacent states. The network of nodes below represents the United States in a simpler form. (Which node represents your home state?)

With four colors, you can color this network so that adjacent nodes are always colored with different colors.

Can you color the graph so that adjacent nodes are colored differently, but only using three colors?



See momath.org/print-and-play/answers/march for the answer.



Four-Color Challenge

In fact, the Four-Color Theorem shows every map can be colored with just four colors so that adjacent regions are colored differently. Even this design can be, if you try!