

# Coloring Math Maps

by David Pleacher

In Figure 1, only two colors are needed in order to distinguish the center region from the region around it.

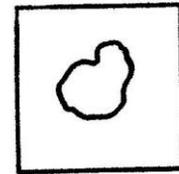


Figure 1

How many colors are needed to distinguish the regions in figure 2? \_\_\_\_\_ (we want the least number of colors needed)

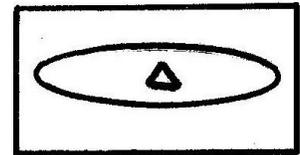


Figure 2

How many colors are needed to distinguish the regions in figure 3? \_\_\_\_\_

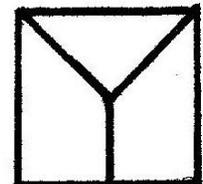


Figure 3

Figure 4 needs 4 colors for telling the regions apart.

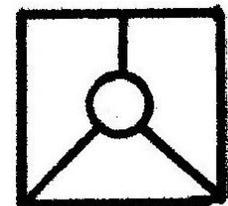


Figure 4

Use colored pencils or crayons, or simply numbers 1, 2, 3, ... and fill in the areas of the following maps so that no two regions of like colors touch.

The object is to use the least number of colors so that adjacent regions (those sharing some common boundary line) are colored differently. Good Luck!

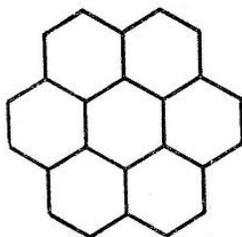


Figure 5

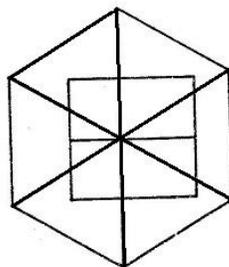


Figure 6

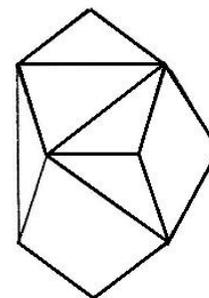


Figure 7

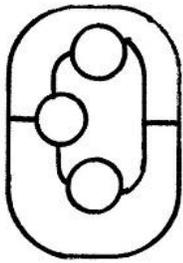


Figure 8

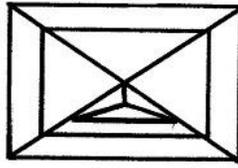


Figure 9

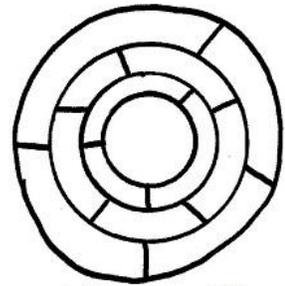


Figure 10

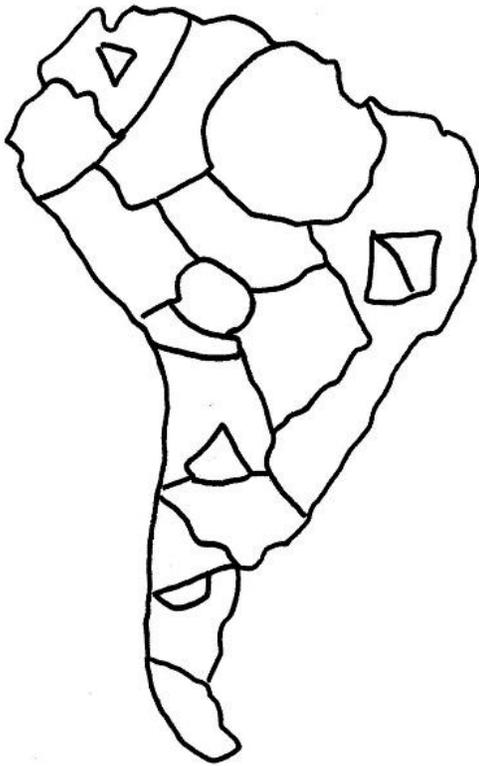


Figure 11

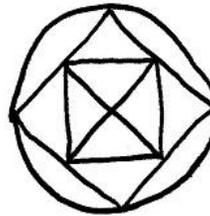


Figure 12

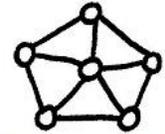


Figure 14

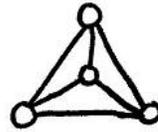


Figure 13

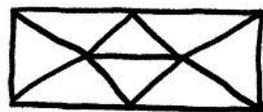


Figure 15

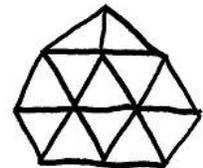


Figure 16

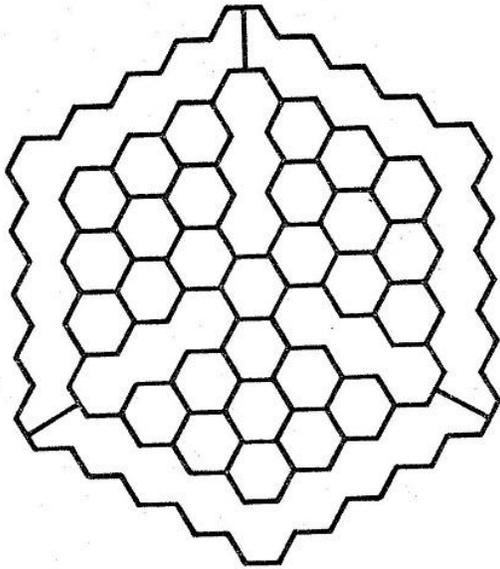


Figure 17

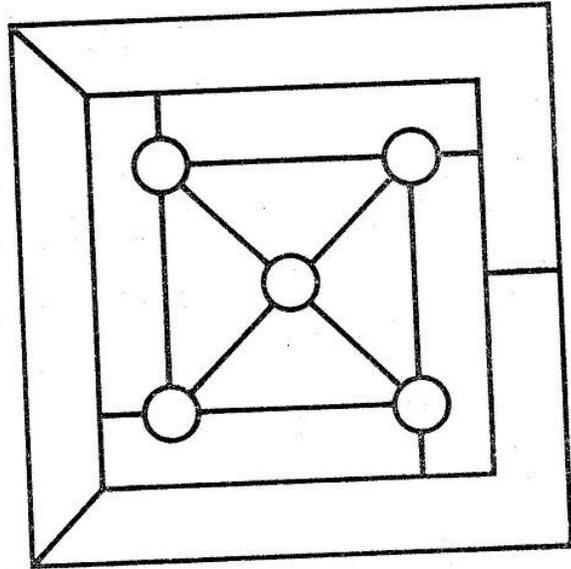


Figure 18

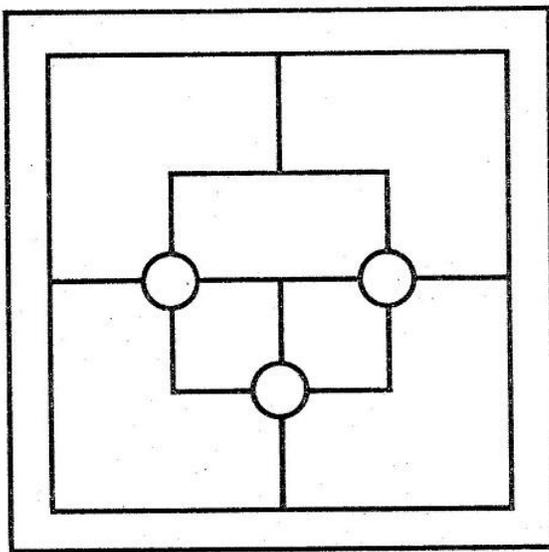


Figure 19

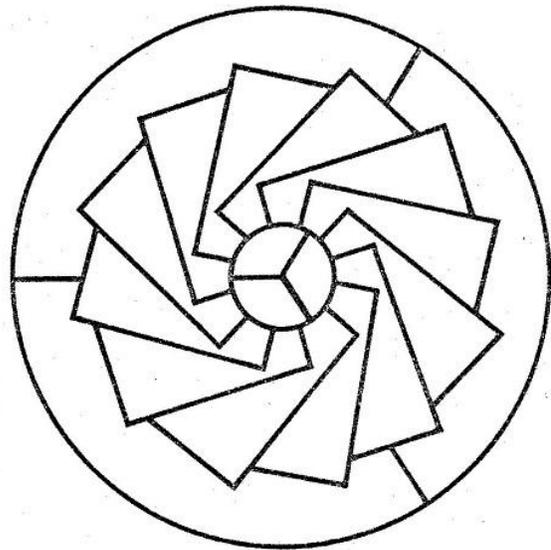


Figure 20