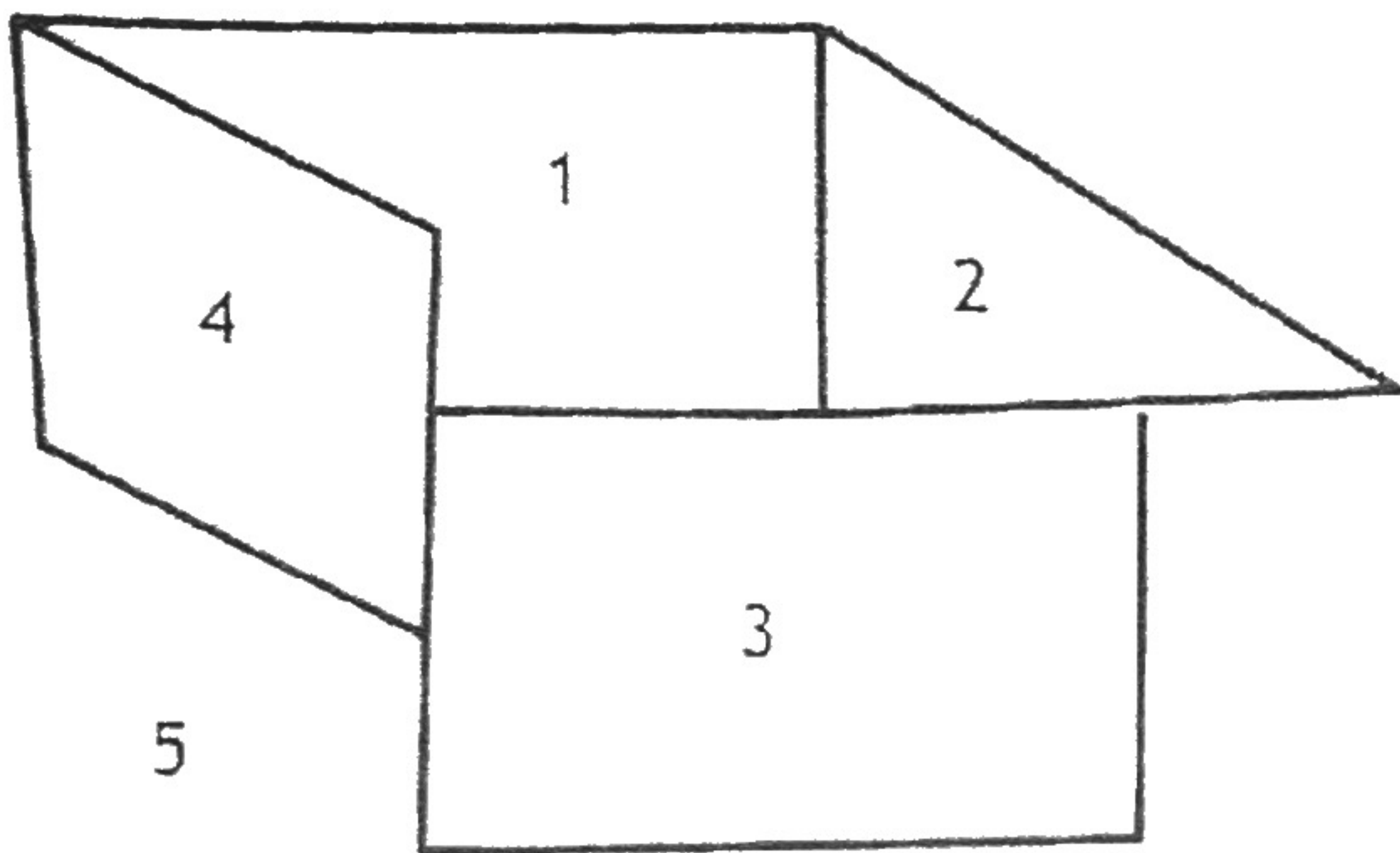


VII.C Student Activity Sheet 10: Coloring Maps and Scheduling

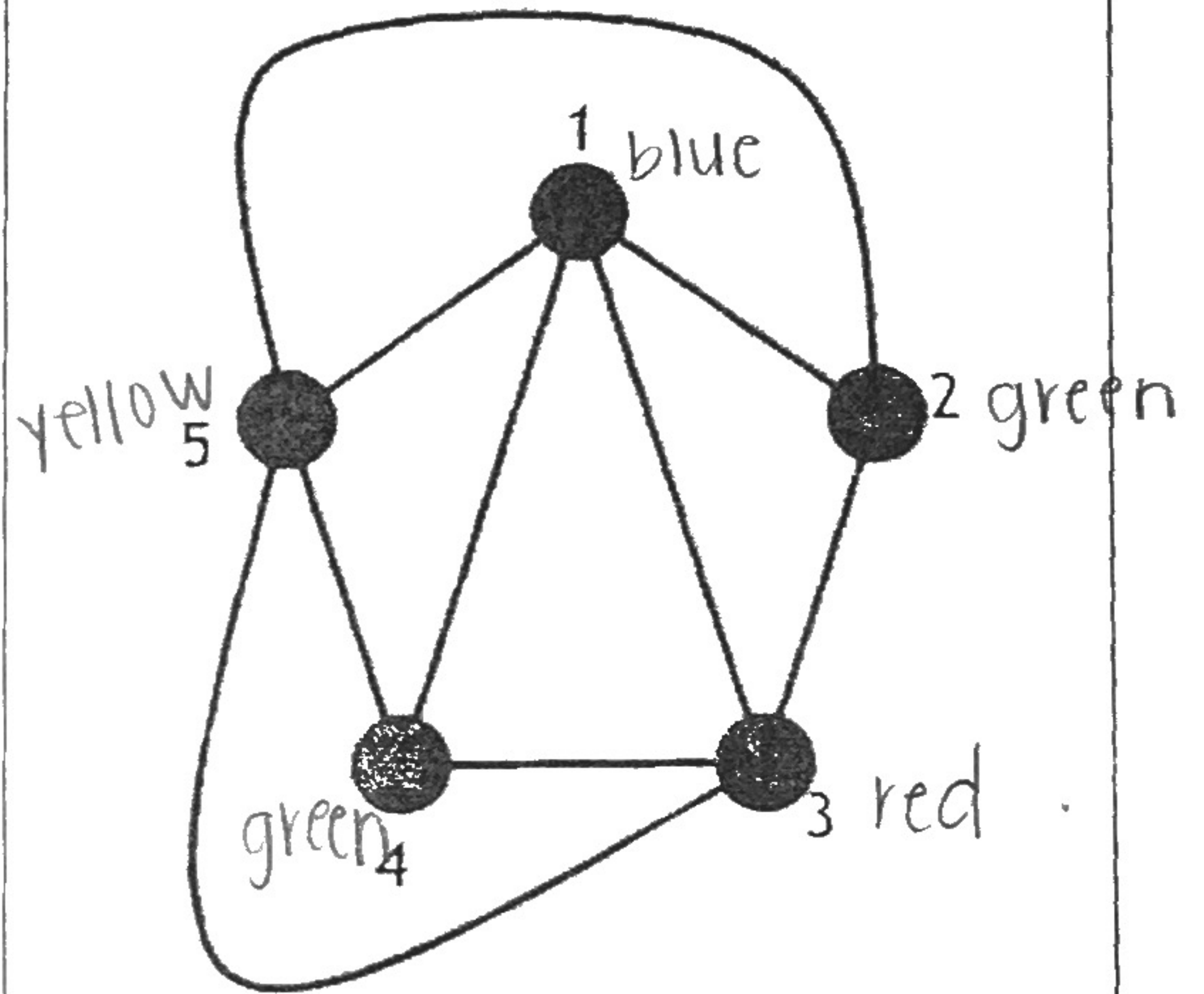
Creating Graphs from Maps

1. Revisit the map coloring exercises from Student Activity Sheet 9 in terms of graphs. For example, Map I can be represented by the following graph. The graph should include a vertex for each country (or region) in your map. If two countries share a border and need to be colored differently, the graph shows an edge between the vertices that represent them. After studying the relationship between Map I and the graph for Map I, create a graph that represents Map II.

After studying the relationship between Map I and the graph for Map I, create a graph that represents Map II.

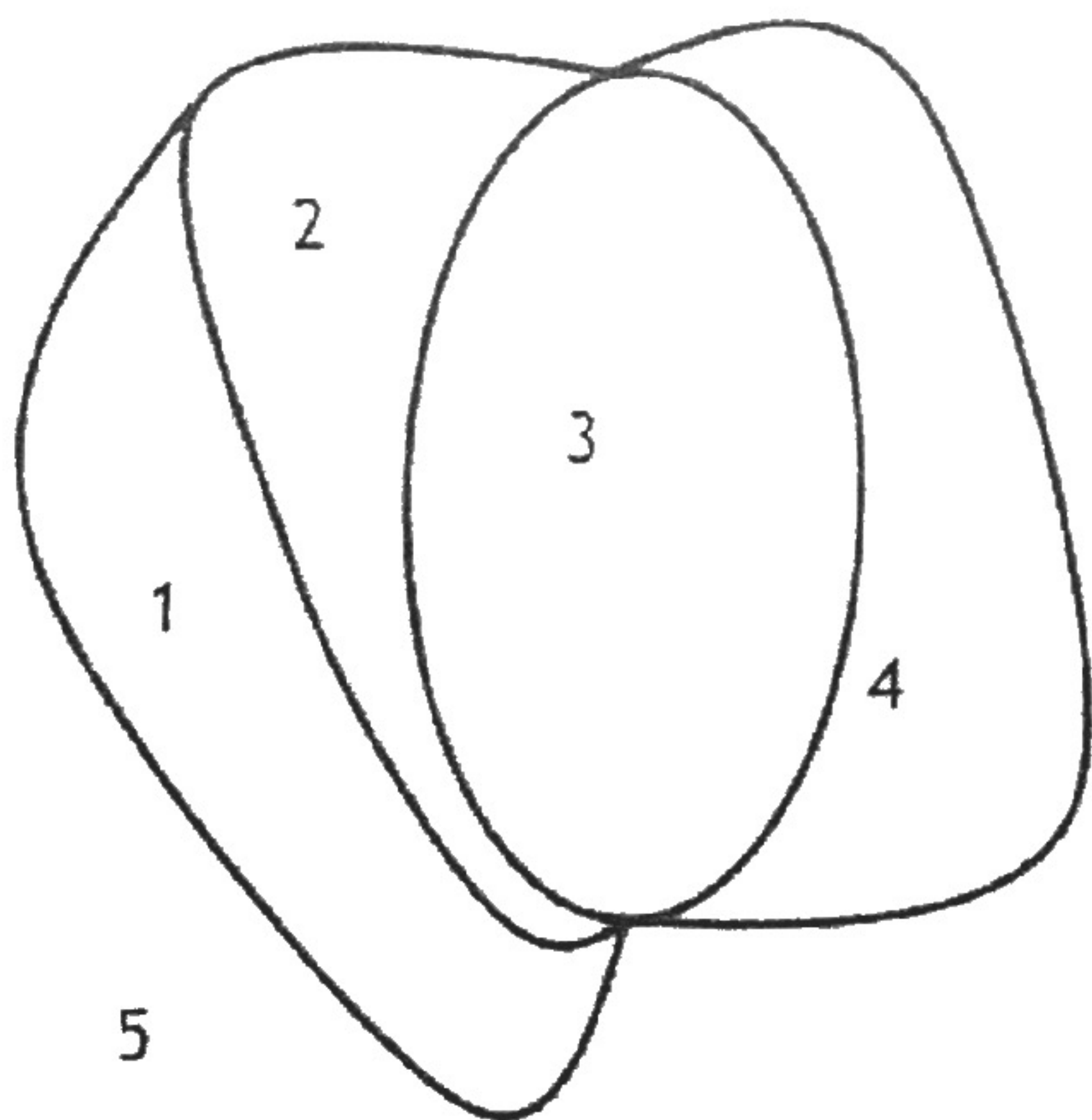


Map I

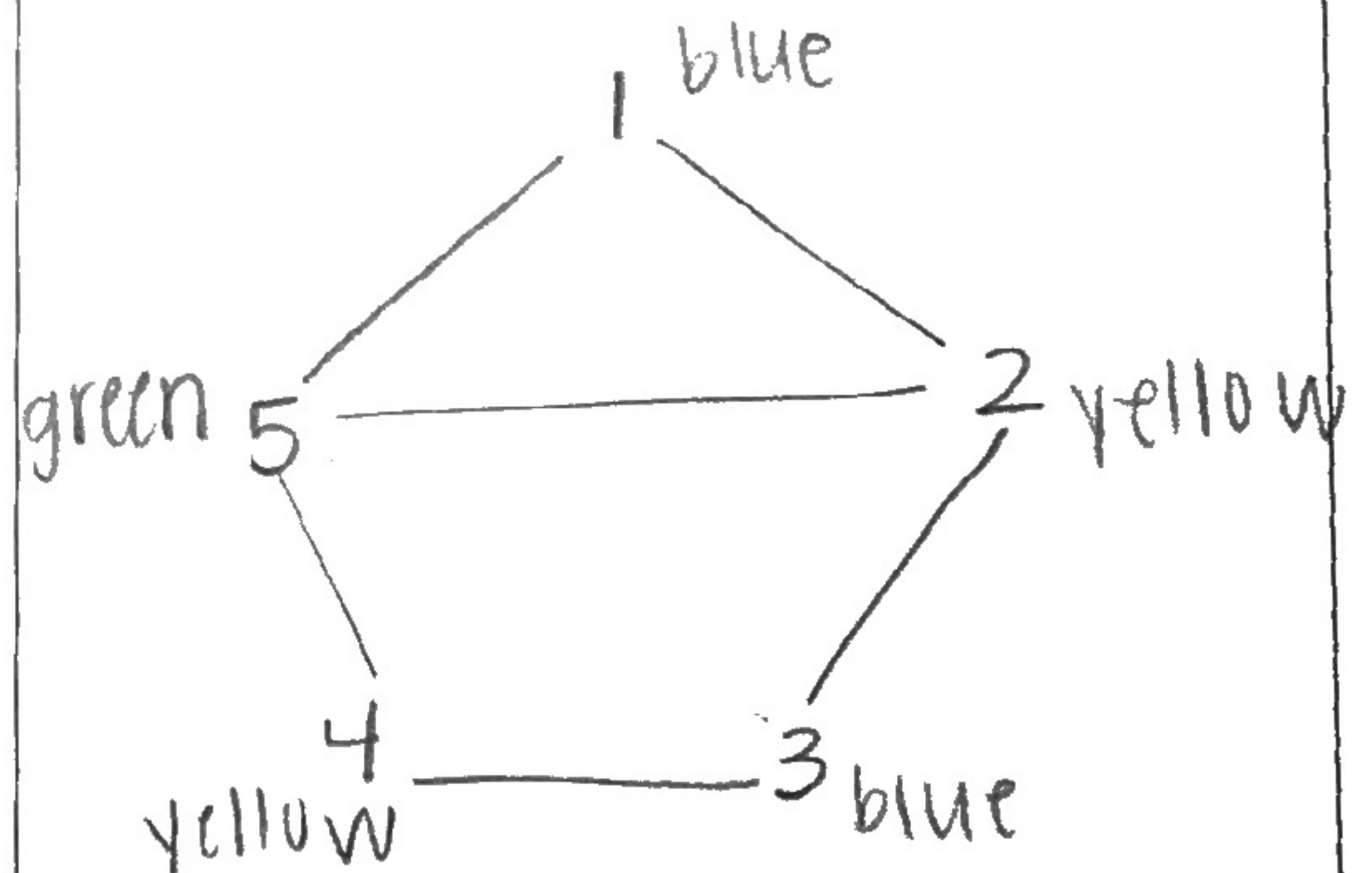


Graph for Map I

4 colors



Map II

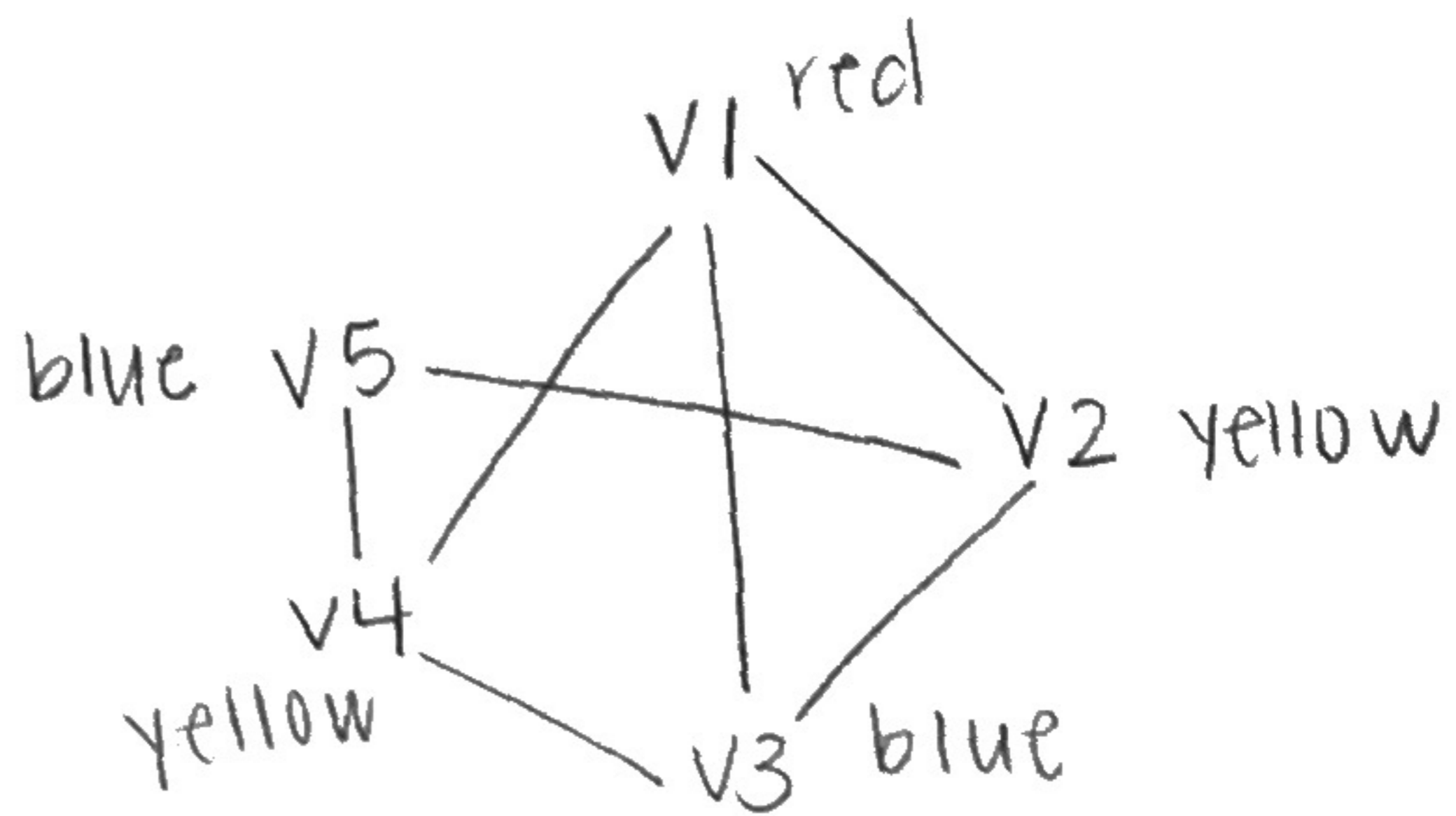
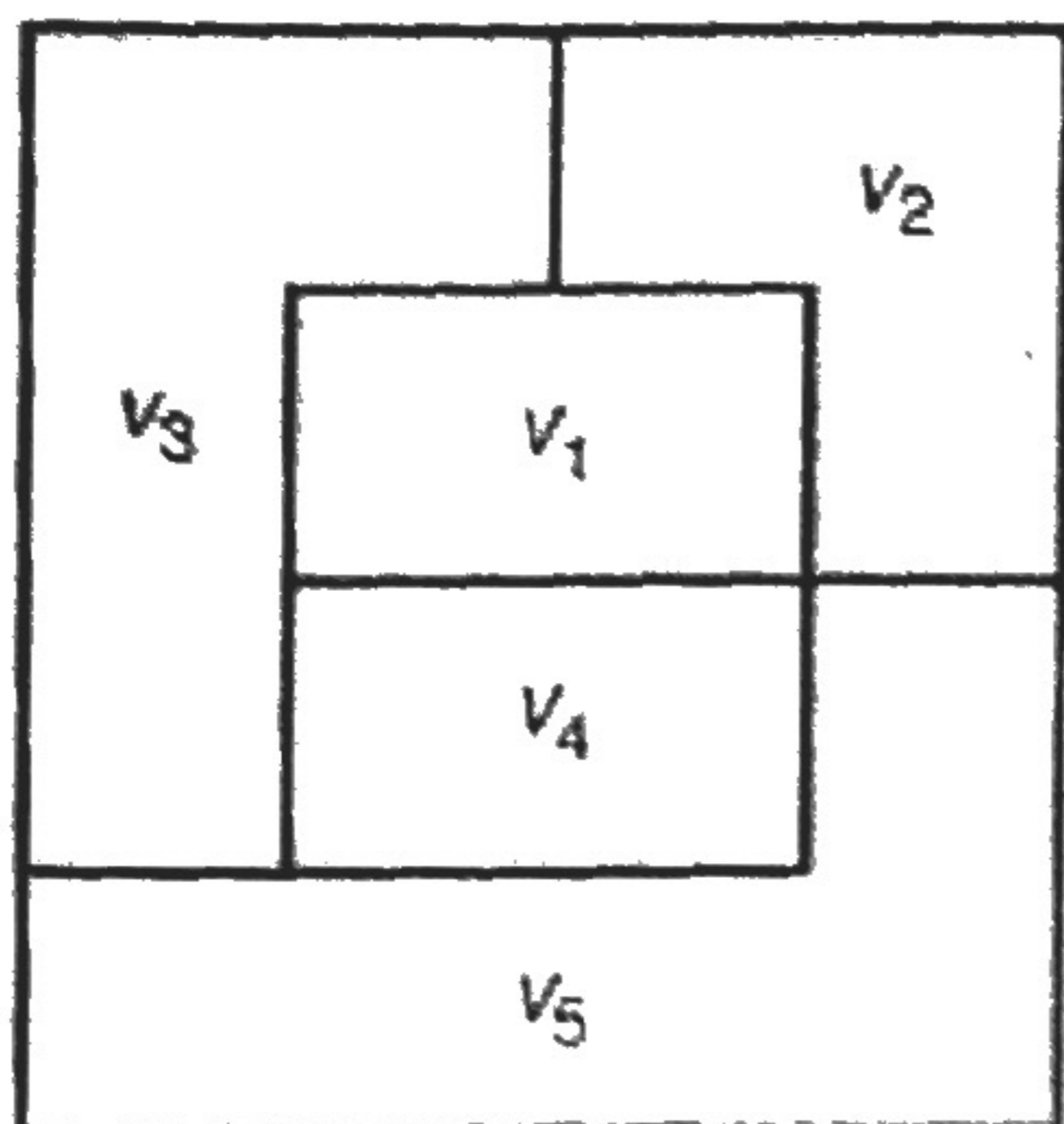


3 colors

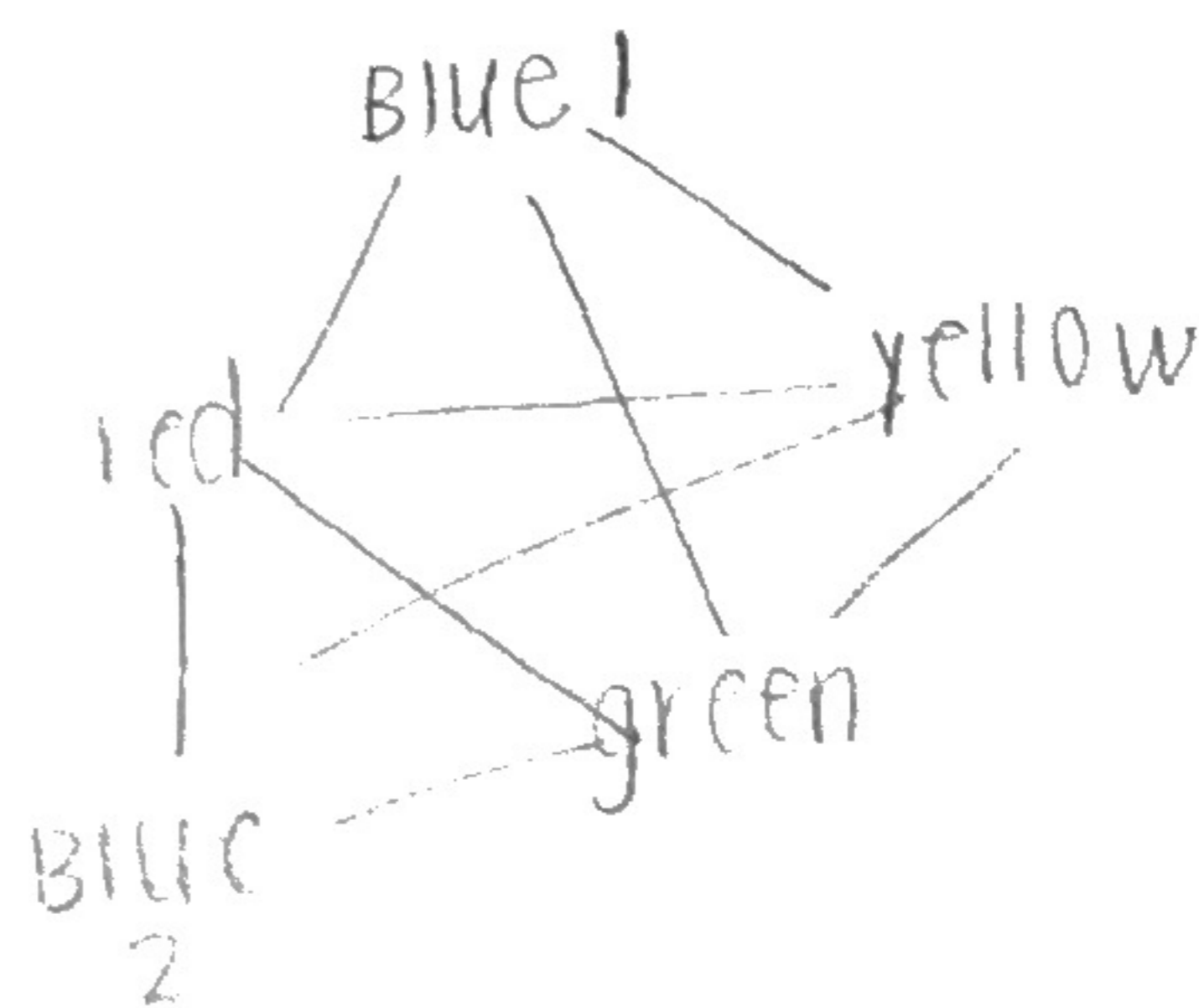
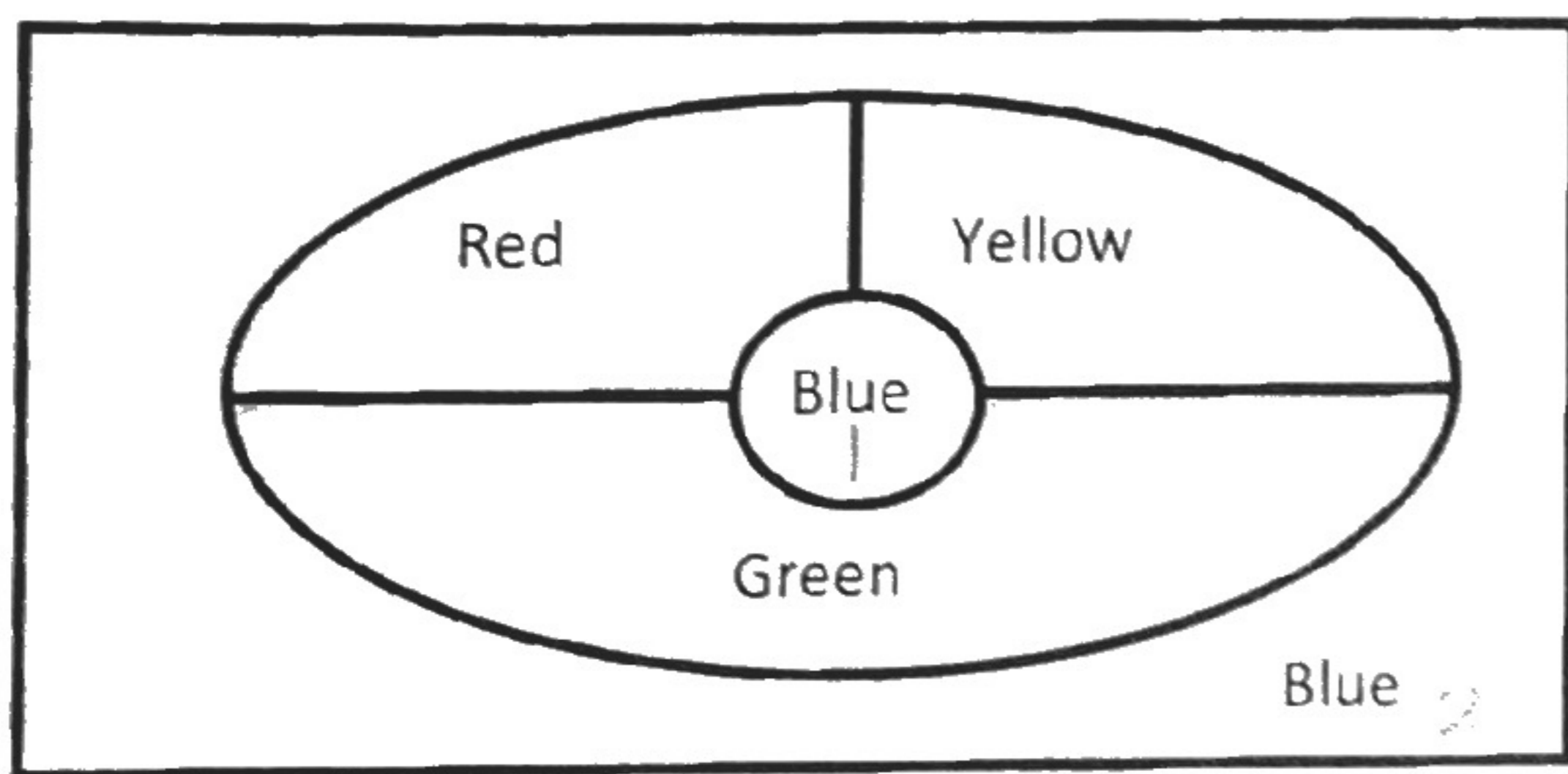
Now, try to create a graph that represents each Map below.

Map

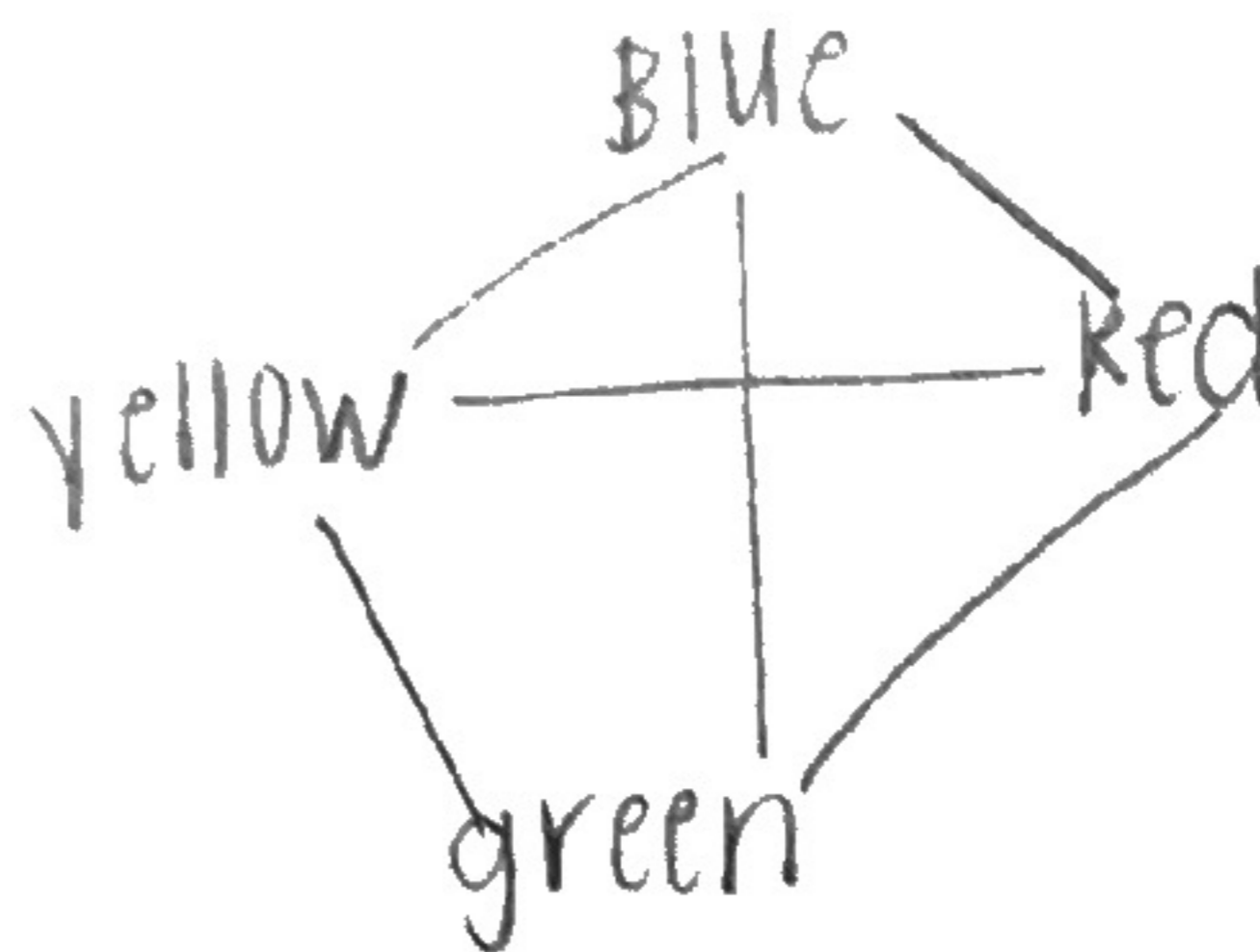
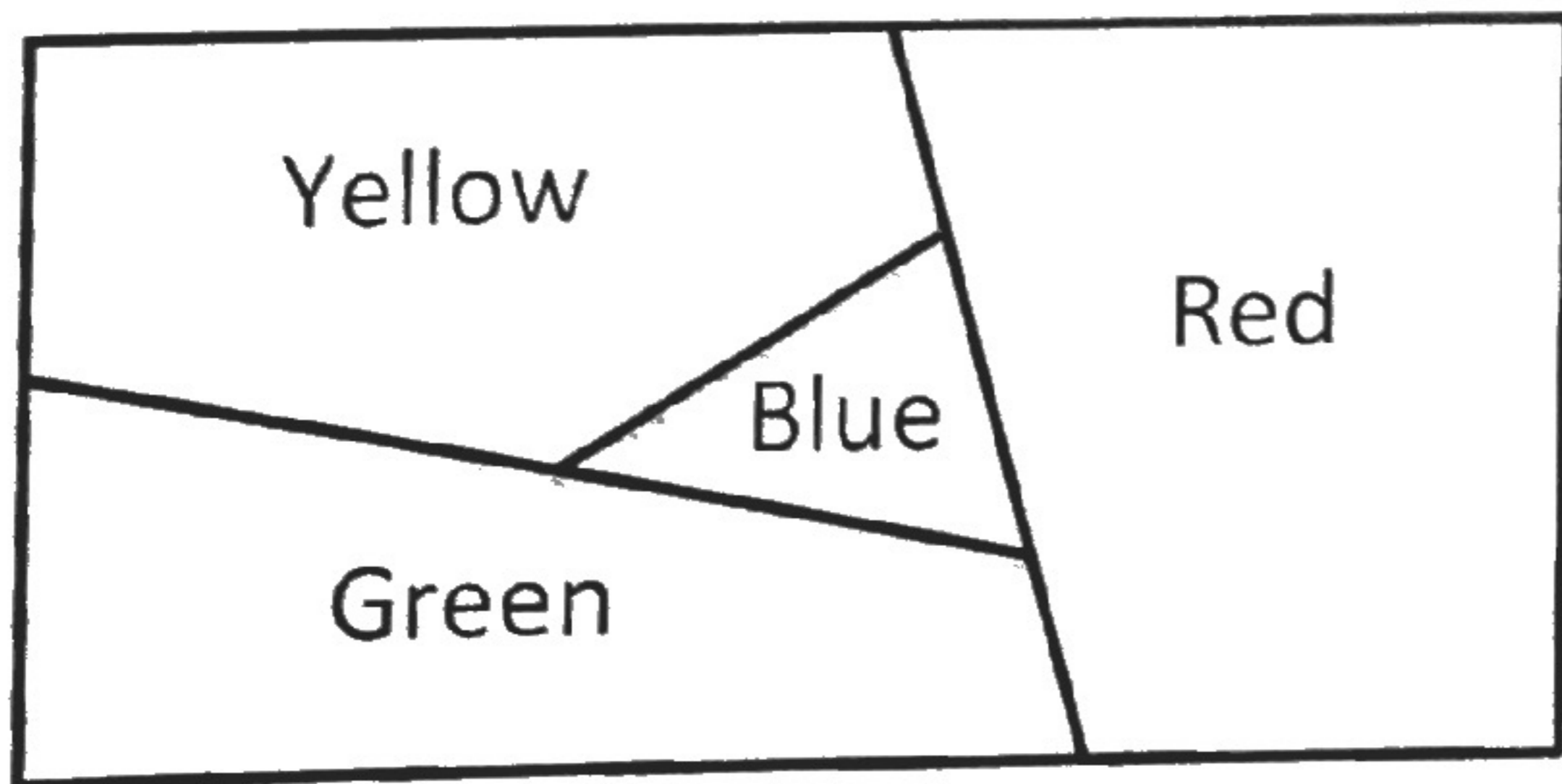
Graph Representation



3 colors



4 colors



4 colors

