Traveling Math Activity 5 - Math on the Map

Get your colouring pencils ready and begin the mathematical map adventure!!!

It is very important to know how to colour a map correctly in order to make it easier for people to find different places. For centuries cartographers have figured out that the minimum number of colours required to colour any flat map is four; however, from the mathematics point of view, this theory could not be proved for a long time. A computer proof was developed in 1976 which finally proved the so-called "Four Colour Theorem."

Whenever you colour a map, these are the rules to remember:

- If two regions on a map share a boundary, they **MUST** be coloured a different colour;
- If two regions do not share a boundary but touch at a single point, they are allowed to be the same colour.

Activity Questions:

1. How many regions are in this map? How many colours do you need to colour this map?





Can you believe THIS is math?

Traveling Math Activity 5 - Math on the Map - continued

2. Given the preceding rules for colouring maps, colour in these maps. How many regions are there in each map? How many colours will you need?



Can you believe THIS is math?