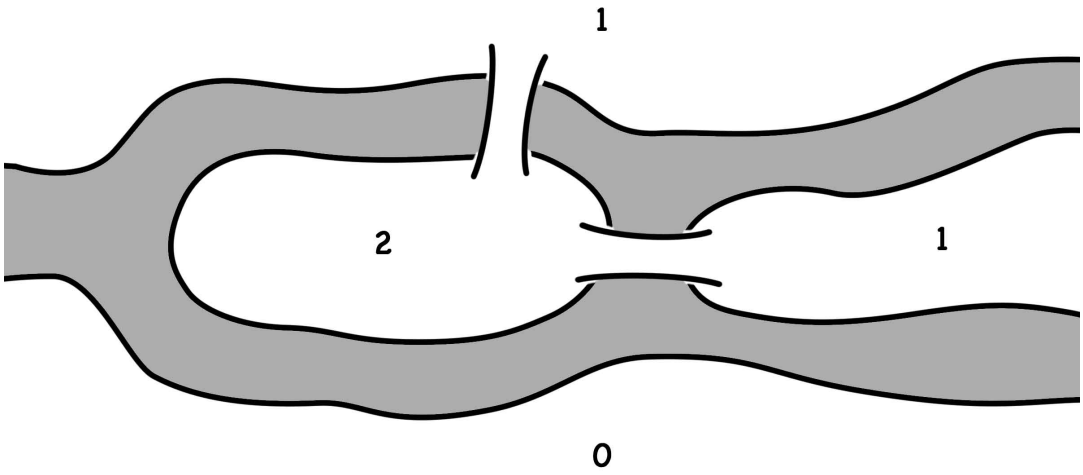
Handout: Building Bridges

1. With ONE bridge, how many bridges touch each district?
2. With TWO bridges, how many bridges touch each district? For example:



   In each case, make a list of the number of bridges touching each district, eg. $2, 0, 1, 1$.
3. Which cases in (2) give situations where all the bridges can be crossed in one path?
4. Do you notice anything about special about the lists for the situations that work in (3)?
5. Try (2) to (4) with THREE bridges.
6. Try (2) to (4) with FOUR bridges.
7. How many bridges can touch a district that you start or finish in? Use your above examples to check.
8. How many bridges can touch a district that you DON'T start or finish in? Use your above examples to check.

If you've got time,

9. Try (2) to (4) with FIVE or SIX bridges!