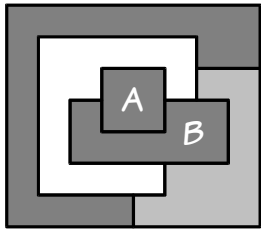


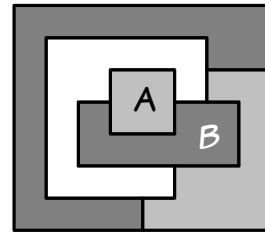
# Map Colouring

When you colour a map **regions** that share a border should have **different colours**.

This map only needs three colours (■, ■, □).

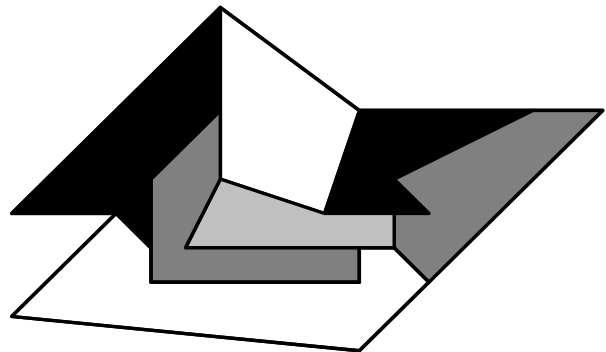
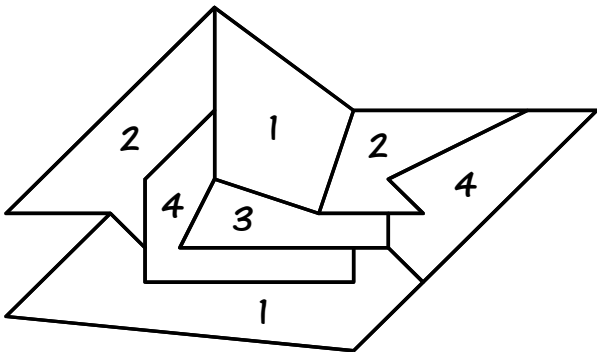


✗ This is no good.  
A and B have to be different colours

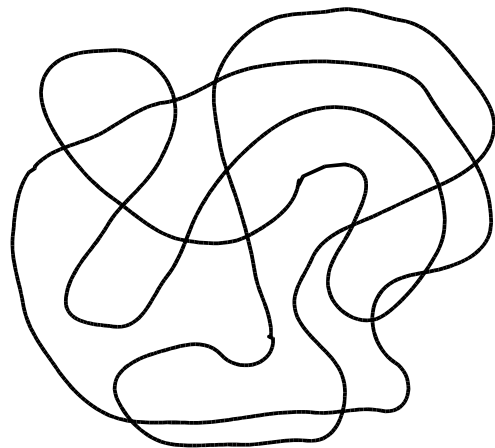
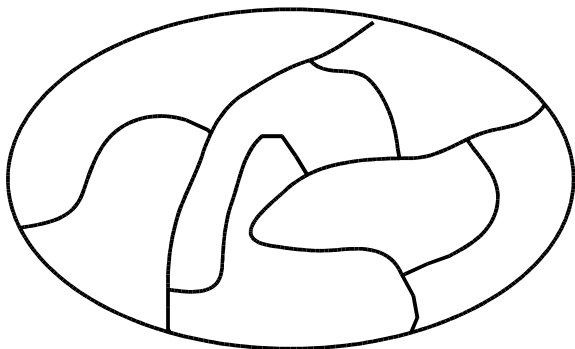


✓ This is OK.  
Neighbours have different colours.

This map needs four colours (■, ■, ■, □).



How many colours do you need to colour these maps?



In 1976 two mathematicians, Ken Appel and Wolfgang Haken, proved that four colours were enough for *any* flat map you could draw.

☞ Make up some maps of you own and try colouring them.

