1.

An elephantine hole

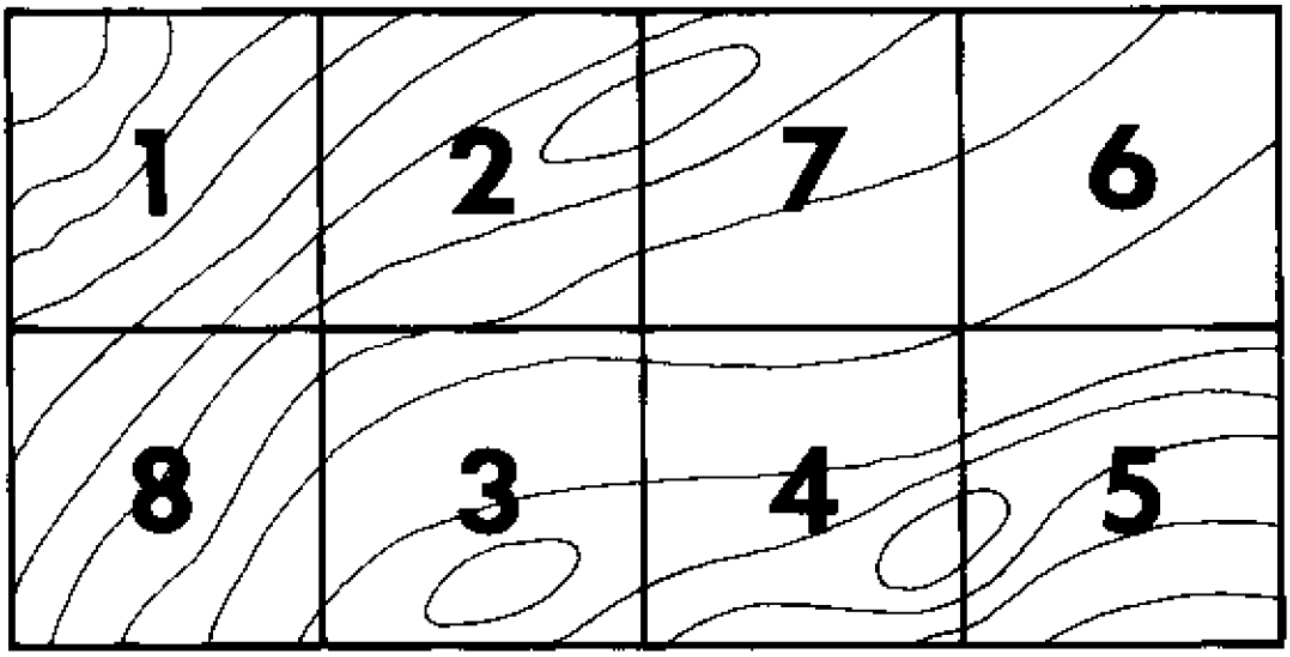
A magician challenged his audience to cut a hole in a sheet of newspaper big enough for a fully grown elephant to walk through. No one took him up on it so he quickly demonstrated to them that it was a practical proposition which needed no sticky tape or magic shrinking potion for the elephant.

2.

Map folding

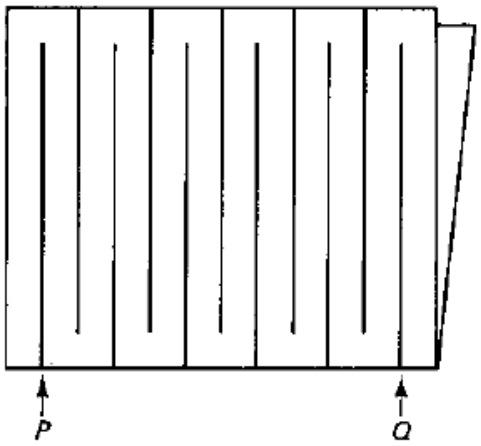
Anyone used to using large Ordnance Survey maps for walking will be aware of the many ways they can be folded to bring the required area into use. The map here has 8 square sections as shown. Can you show how it be folded so that the eight sections come in the order 1, 2, ⋯, 8, underneath one another with the 1 on top?

Cut out a rectangle of paper to represent the map, mark in the squares and label them with the numbers 1 to 8 as shown – it helps to have both sides labelled – and see what you can do.

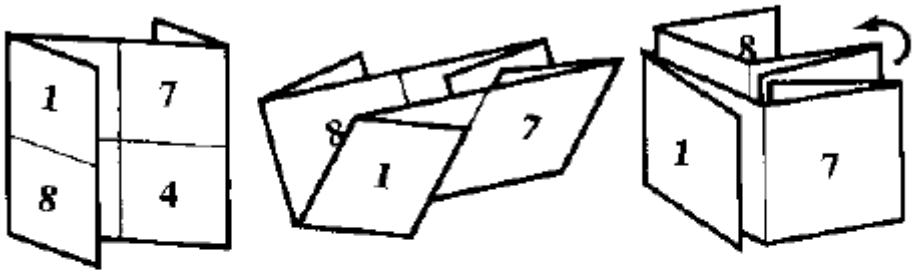


An elephantine hole

Take a folded sheet of newspaper and make cuts as shown in the diagram alternately from the folded edge and the edge opposite the fold. Then cut along the fold line from P to Q. The result is a long loop of newspaper. By making a sufficient number of cuts theoretically the loop can be made as large as one pleases and certainly large enough for an elephant!



Map folding



Fold the 1 and 8 forward in front of the 2 and 3, and the 6 and 5 backward behind the 7 and 4. Now fold along the middle horizontally so that 8 and 4 are at the back leaving just 1 and 7 visible in front. Finally, fold along the vertical and push the numbers on the right-hand side in between the 3 and 8 on the left-hand side.