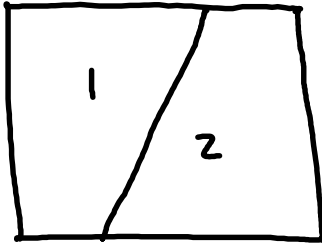
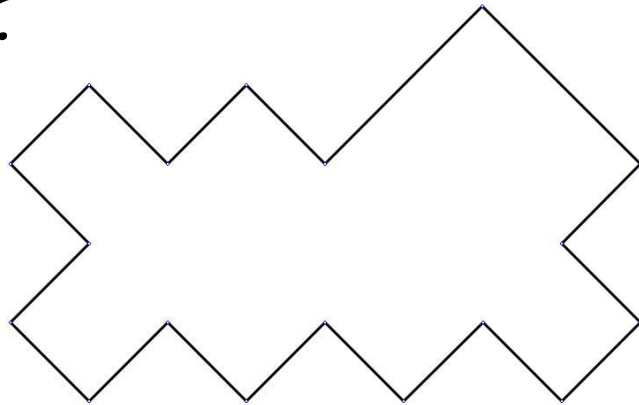


MATHEMATICS OF CUTTING



If you draw a straight line on a piece of paper, you divide it into two regions.

- ① If you draw 10 straight lines on a piece of paper, what is the least number of regions you could get?
- ② What is the largest number of regions you could get if you draw 10 lines?
- ③ How can you cut this shape into two pieces so that the two pieces are exactly the same shape?



- ④ How can you cut a cake into 8 pieces with only three cuts?