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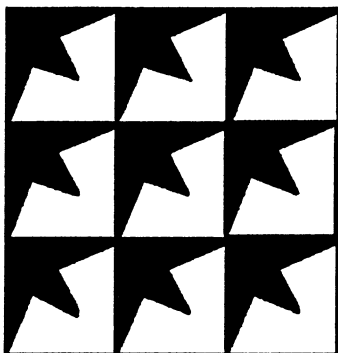
# TILING

Numbers 1 and 2 are examples of tiling patterns created by using the tiles shown at number 3, in different arrangements on the grid at number 4.

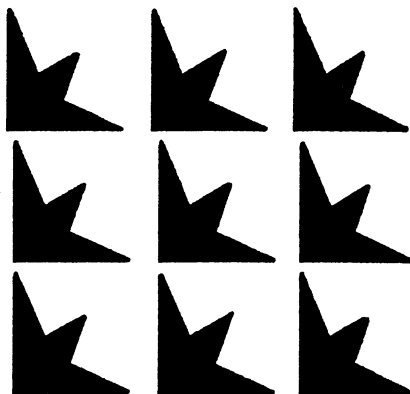
Photocopy and cut out a set of tiles (number 3).

*How many different patterns can you achieve by the different ways you display them on the grid at number 4?*

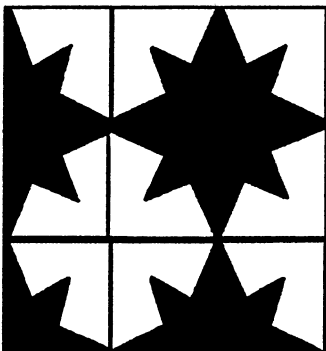
1



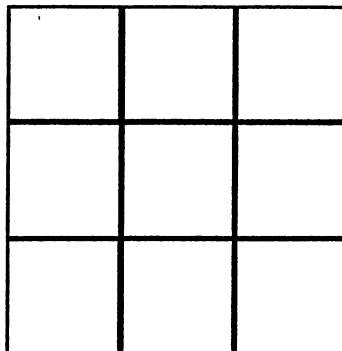
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2



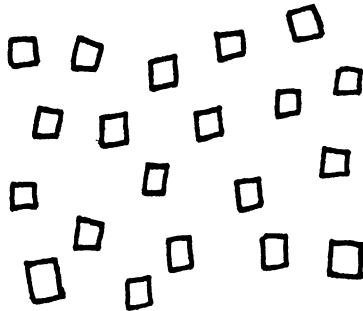
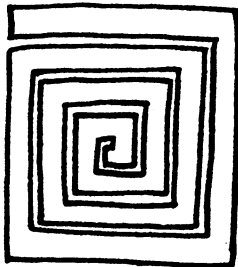
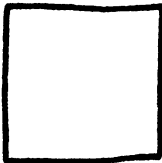
4



# AREA ILLUSIONS

- 1 Take ten squares of paper of identical area - memo cube notepaper is ideal.
- 2 On a chart paste one of the pieces in its current square shape.
- 3 Now cut and re-arrange each of the other pieces to demonstrate how different the same area can appear:

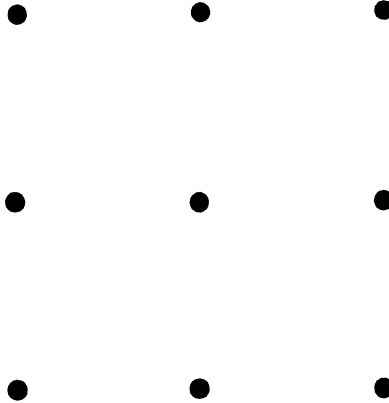
e.g.



*What factors help confuse our judgement about the amount of area taken up by something?*

# A LOGIC GAME

This is a game of logic and strategy. To begin, draw this grid.



The first player draws a line between any 2 adjacent points, (the centre point has eight adjacent points). All following moves are of similar fashion.

If an area is enclosed, (without gaps in it's walls), the player who made the move to close it, owns the area. They mark their initial inside the area.

A player may draw a line through another, providing it does not pass through an enclosed area. It is possible to enclose two areas with one move.

Variables:

- Try adjusting the size of the grid. This makes for longer games and greater possibilities.
- Try playing with three or more participants on larger grids. You will have a completely new set of strategies to discover.

*-Choose your favourite version of the game and name it.*