MATHMAG

1. PATTERNS FROM NUMBERS
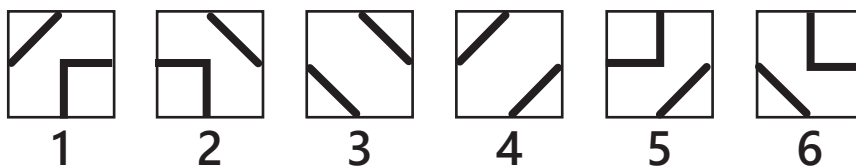
Here is part of the tables chart.

1	2	3	4	5	6
2	4	6	8	10	12
3	6	9	12	15	18
4	8	12	16	20	24
5	10	15	20	25	30
6	12	18	24	30	36

Here is the remainder when each number is divided by 7.

1	2	3	4		
2	4	6	1	3	
3	6	2			
				6	
		1			2
6					

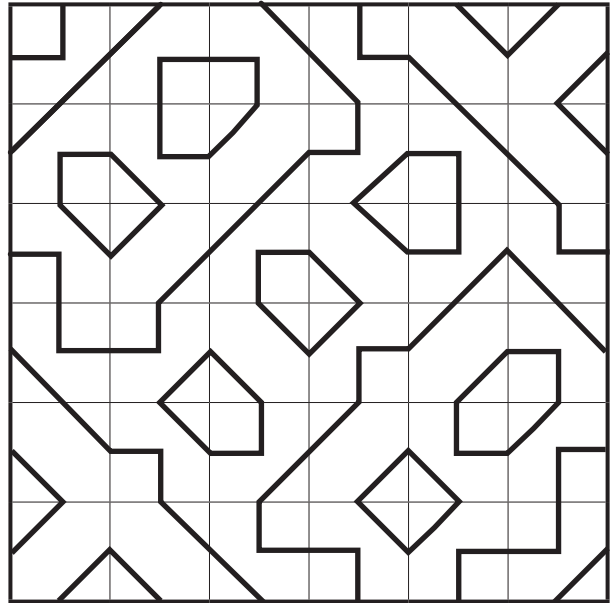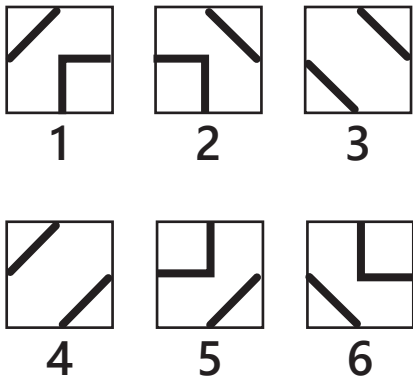Here is the code for the numbers 1 to 6:

Here is the pattern when the code takes the place of the number (the remainder).
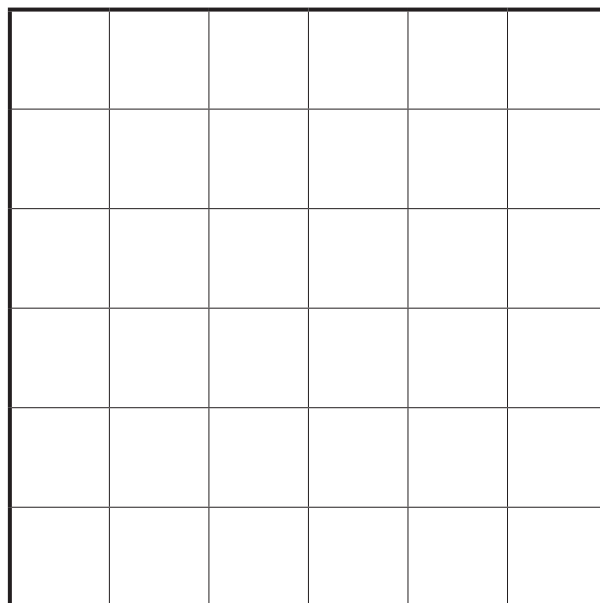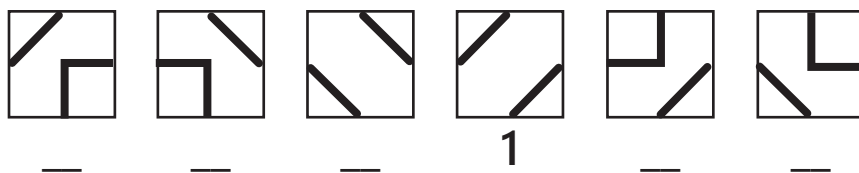
Complete the pattern.

2. SECRET OF THE PATTERN

Using the code from the front page, find out the secret of this pattern.
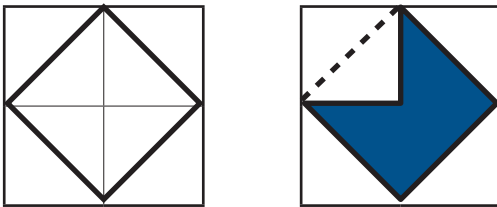

3. MY PATTERN

Make your own design. Write the numbers 1 to 6 in a different order. Fill in the new pattern.

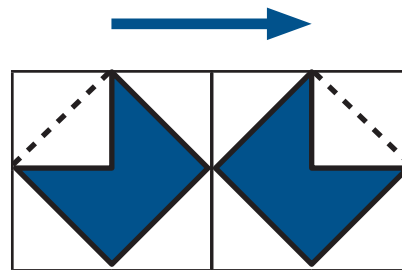
___   ___   ___   1   ___   ___

4. PATTERNS

You will need 1-cm square grid paper & colouring-in pencils.

1. To make a pattern begin with a basic motif on a 2 cm x 2 cm grid.

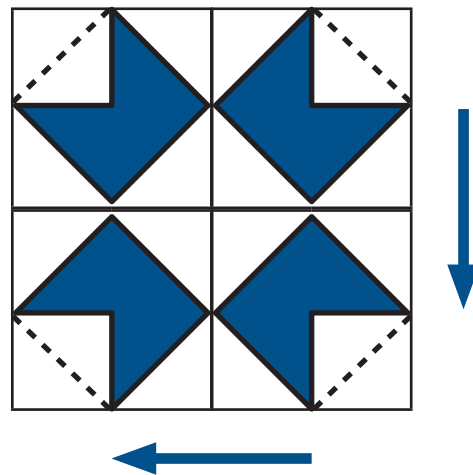(imagine the grid divided into 8 triangles. Only 3 have been coloured so we call this a ⅜ pattern.)

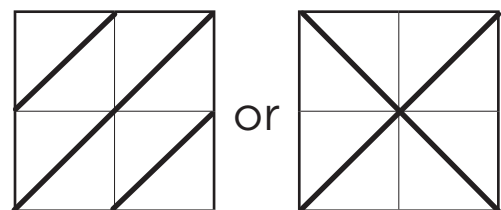2. If this motif is flipped from left to right we get:

3. When the motif is flipped from top to bottom, we get the following to complete the pattern. This pattern can be joined to make a larger pattern.
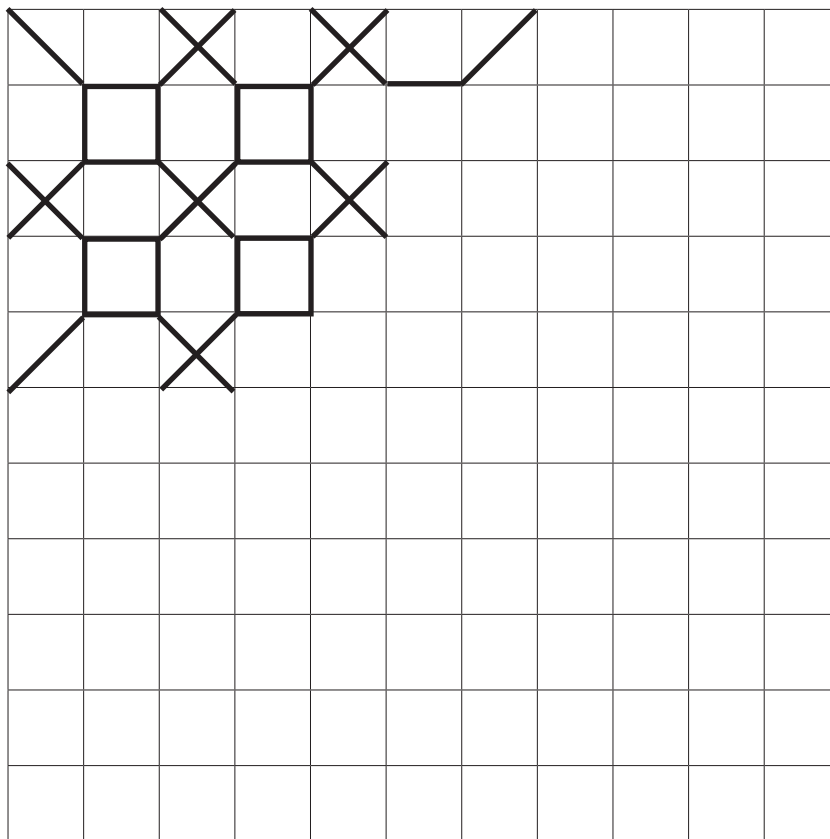
4. Beginning with a basic motif on a 2 cm x 2 cm grid make up other fraction patterns.
- Investigate ½, ¼, ⅝, etc.
- Try starting with a different motif

or

Continue this pattern to fill the rectangle, then colour it to show the pattern.

ANSWERS

The Mathematical Association of Western Australia Inc.

ABN: 83 179 618 286   Phone: 08 9345 0388

Street: 12 Cobbler Place, MIRRABOOKA 6061   Web: www.mawainc.org.au

Postal: P. O. Box 440, MIRRABOOKA 6941

www.facebook.com/MAWAinc   @MAWAinc   MAWAinc