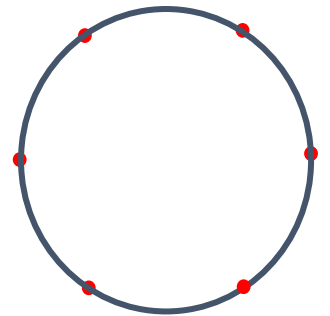
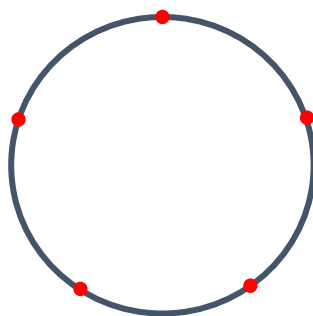
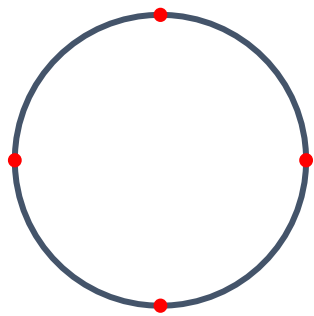
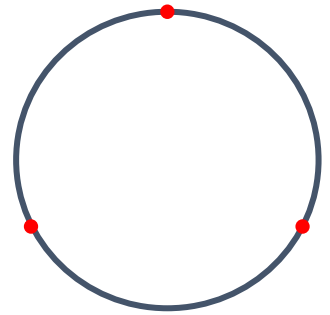
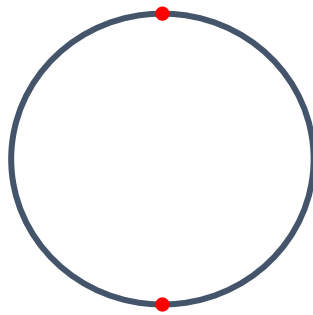
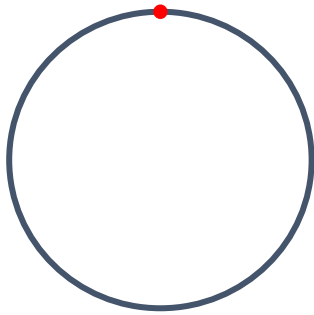


Mystic Roses Investigation

Templates for the first six Mystic Rose patterns are drawn below.

You need to join each of the points to all of the other points to make a pattern.



Each Mystic Rose pattern divides the circle into a number of regions.

Complete the table below.

Pattern Number	1	2	3	4	5	6
Lines	0	1				
Regions	1	2				

How many lines and regions would there be in pattern number 7?

Can you find a formula for the number lines and regions in pattern number 'n'?

How many lines and regions would there be in pattern number 100?

