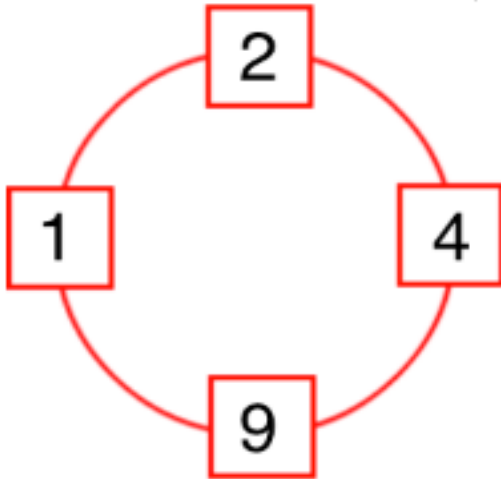


## Ring a ring of numbers

Here is a picture of four numbers placed in squares on a circle so that each number is joined to two others:



What do you see?  
What do you notice?

Choose four numbers from this list: 1, 2, 3, 4, 5, 6, 7, 8, 9 to put in the squares so that the difference between joined squares is odd. Only one number is allowed in each square. You must use four different numbers.

What can you say about the sum of each pair of joined squares?

What must you do to make the difference even?  
What do you notice about the sum of the pairs now?

There is a sheet of blank squares to record your findings on the next page.

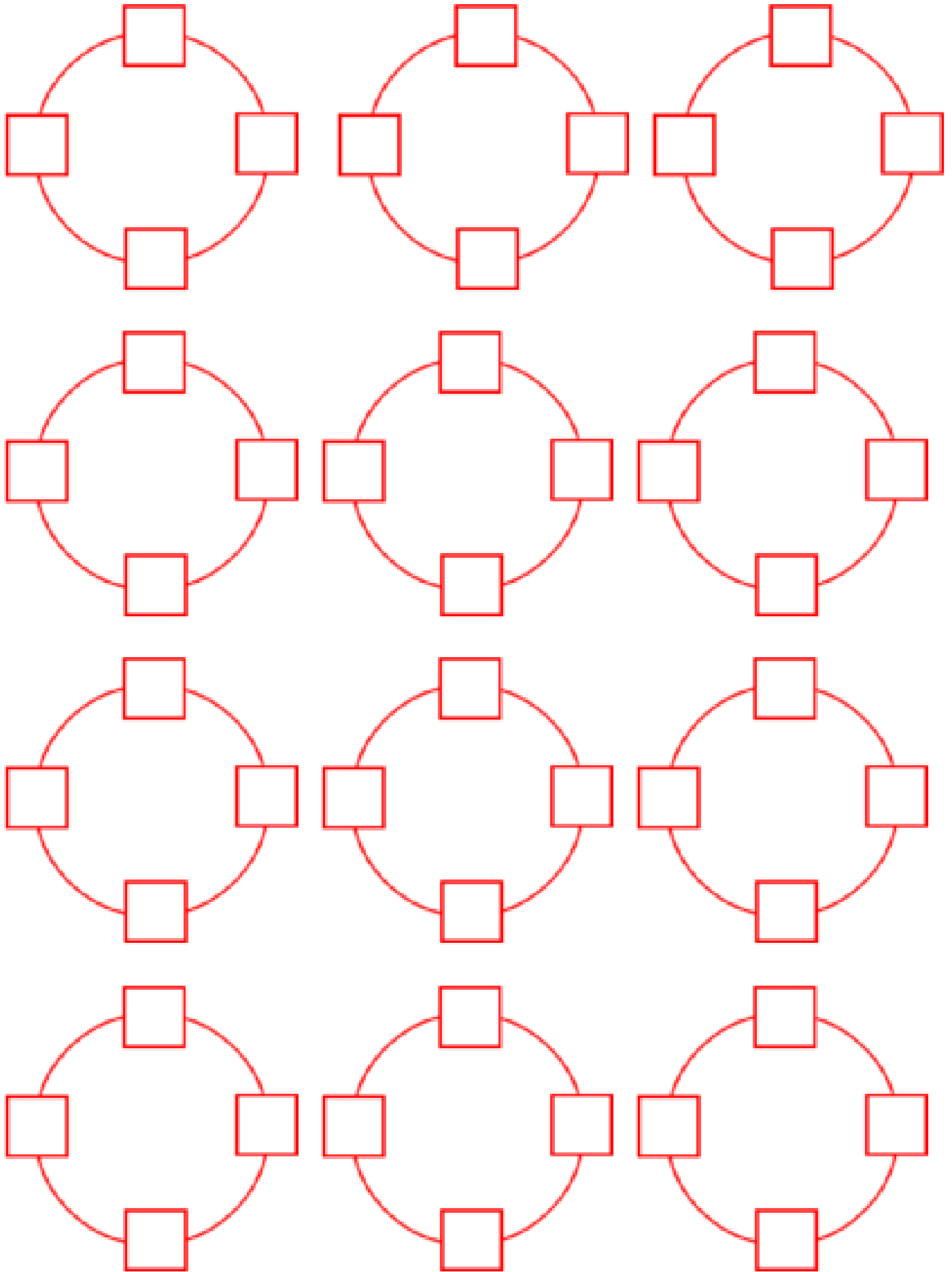
I would suggest writing the numbers out on pieces of paper and trying out lots of different ways on a table or floor before writing them down.

To get started put 1 number in a square and work around from that one. You could work systematically by doing this.

Remember:

odd numbers: 1, 3, 5, 7 and 9.

Even numbers: 2, 4, 6 and 8



**Answers:**

For an odd difference, the numbers have to go odd, even, odd and even.

For even difference, all the numbers have to be even or odd.

Here are some examples of the odd difference combinations:

