

1. Sequence = 1, 3, 6, 10, 15

From 1 to 3, we add 2

From 3 to 6, we add 3

From 6 to 10, we add 4

From 10 to 15, we add 5

Therefore next 3 numbers,

$$15 + 6 = 21$$

$$21 + 7 = 28$$

$$28 + 8 = 36$$

The pattern = 1, 3, 6, 10, 15, 21, 28, 36

This pattern is called the "Triangular numbers"
"triangular numbers".

2.

First, list the first 5 odd numbers:

1, 3, 5, 7, 9

Now we have to the odd numbers,

$$1 + 3 = 4$$

$$4 + 5 = 9$$

$$9 + 7 = 16$$

$$16 + 9 = 25$$

The total sum the odd numbers is 25

If odd numbers added like this it forms
square numbers

3.

First observe the pattern.

Each number is doubling the previous number

$$1 \times 2 = 2$$

$$2 \times 2 = 4$$