

# Computers and Its Ports Formula

## 1) Number of Cables :

$$\text{Formula : } NC2 = \frac{n * (n-1)}{2}$$

N --- Number of nodes

Example : 20 – Computers are connected to each other so how many cables are use there :

$$\begin{aligned} 20c2 &= 20 * (20 - 1) \\ &\frac{\text{-----}}{2} = 380 / 2 = 190\text{-Cables} \end{aligned}$$

## 2) Number of Ports :

$$\text{Formula : } (n - 1) * n$$

(n – 1) = Number of Ports

Total = \* n – total number of ports

Example : How many ports in four nodes

(n – Number of Nodes)

Four nodes have : 3 – ports (n – 1)

$$(4 - 1) = 3$$

$$\text{Total Ports : } (4 - 1) * 4 = 12$$