172.168.10.0/22

255								255								0								0							
2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

HOW TO FIND THE NUMBER OF NETWORK

2^n (Here, n indicated total number of bits borrowed from host)

$2^6 = 64$ (You can create sixty four networks)

HOW TO FIND THE NUMBER OF IP ADDRESS ON EACH NETWORK

2^n (Here, n indicated total number of host bits)

$2^{10} = 1024$ (On each network you will have 1024 IP Address)

HOW TO FIND THE NUMBER OF HOSTS IN EACH NETWORK

$2^n - 2$ (Here, n indicated total number of remaining host bits)

$2^{10} - 2 = 1022$ (You will have 1022 Host IP Address on each network)

172.168.10.0/22

255								255								0								0							
2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Network: 64

Host on each network: 1022

How to find the network ID of each network

Just find the value of last octed borrowed from the host

$2^2 = 4$

Network Number	Network ID	Host ID	Broadcast ID
1	172.168.0.0	172.168.0.1 - 172.168.3.254	172.168.3.255
2	172.168.4.0	172.168.4.1 - 172.168.7.254	172.168.7.255
3	172.168.8.0	172.168.11.1 - 172.168.11.254	172.168.11.255
4	172.168.12.0	172.168.12.1 - 172.168.15.254	172.168.15.255
5	172.168.16.0	172.168.16.1 - 172.168.19.254	172.168.19.255
64	172.168.252.0	172.168.252.1 – 172.168.255.254	172.168.255.255