

Subnet Example:

IP Address: 192.168.10.0

and

Subnet Mask: 255.255.255.128 /25

Mask in binary: 11111111.11111111.11111111.10000000

Number of Subnets: $2^1 = 2$ subnets

Block size: $256 - b = 256 - 128 = 128$ (block size)

Valid Hosts: $2^n - 2$, $2^7 - 2 = 128 - 2 =$
126 host addresses (per subnet)

i.e. 2 sub-networks

192.168.10.0

(valid hosts, 192.168.10.1 to 192.168.10.126)

and

192.168.10.128

(valid hosts, 192.168.10.129 to 192.168.10.254)

(See Lecture 3 slides 16 to 19 for more information)