IPv4 Review

Private Network Class – Not Registered, manage locally to your network.
Unregistered. 3 Classes
Public Network Class – Registered, IANA/ISP, Pay, 5 classes, ISP MANAGES

To Find First Address in Valid Range – ADD 0.0.0.1 to NET ID
To Find Last Address in Valid Range – SUBTRACT 0.0.0.1 from BROADCAST ID
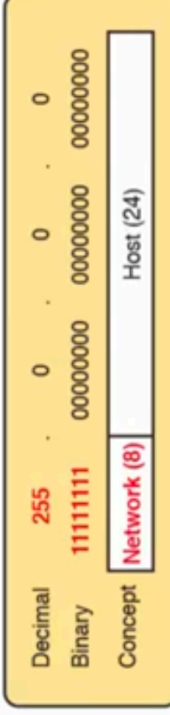
Conversions:
Binary to Decimal / Decimal to binary
Network ID to binary or decimal
Broadcast ID to binary or decimal
Subnetmask/Prefix to binary or decimal

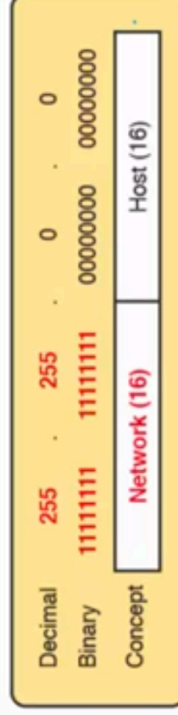**Network** Value defines the neighborhood you live in. Can not change.

Host Value defines your specific location in the neighborhood. This value can change.

Current Formulas to know:
128.64.32.16.8.4.2.1
2^H-2=Hosts

32bits | 4octets | 8 bits each

A

Decimal	255	.	0	.	0	.	0
Binary	11111111		00000000		00000000		00000000
Concept	Network (8)			Host (24)			

N . H . H . H
Default Prefix = /8
Example: 10.10.10.10/8

B

Decimal	255	.	255	.	0	.	0
Binary	11111111		11111111		00000000		00000000
Concept	Network (16)				Host (16)		

N . N . H . H
Default Prefix = /16
Example: 172.16.4.10/16

C

Decimal	255	.	255	.	255	.	0
Binary	11111111		11111111		11111111		00000000
Concept	Network (24)					Host (8)	

N . N . N . H
Default Prefix = /24
Example: 192.168.1.10/24