

10
●○

8:

24:

IPv4 Addresses

$$0\ 0\ 0\ 0\ 0\ 0\ 0\ 0 = 0$$

●○○○○○○○○

$$128\ 64\ 32\ 16\ 8\ 4\ 2\ 1 = 255$$

●●●●●●●●

$$\underbrace{142}_8, \underbrace{250}_8, \underbrace{217}_8, \underbrace{142}_8 = 32 \text{ bits.}$$

255 . 255 . 255 . 255
●●●●●●●● . ●●●●●●●● . ●●●●●●●● . ●●●●●●●●

142 . 250 . 217 . 142
●○○●○○○● . ●○○○○○○● . ●○○○○○○● . ●○○○○○○●

○ ○ ○ ○ ○ ○ ○ ○ . ○ ○ ○ ○ ○ ○ ○ ○ . ○ ○ ○ ○ ○ ○ ○ ○ . ○ ○ ○ ○ ○ ○ ○ ○

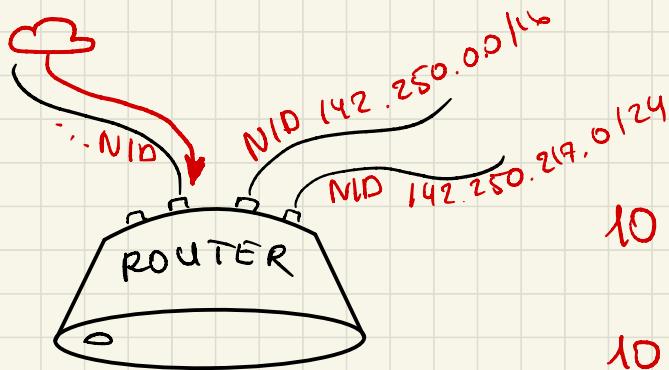
4,294,967,296 Addresses

7,8B people in the world

network ID	address
142.250	217.142 /16

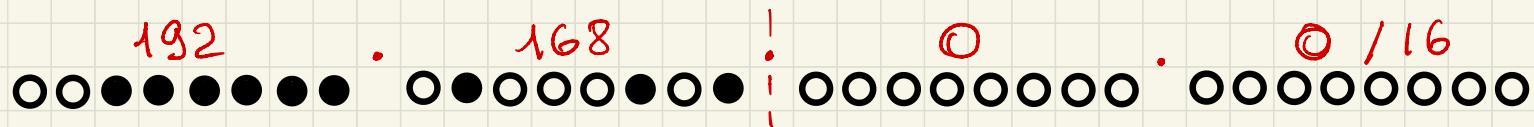
network ID	address
142.250.217	142 /24

Subnets



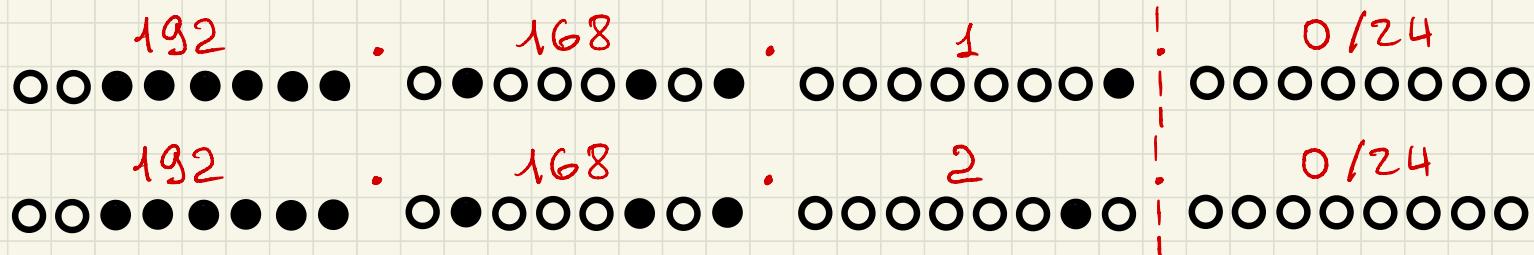
10.building.floor.device

10.region.zone.vm.

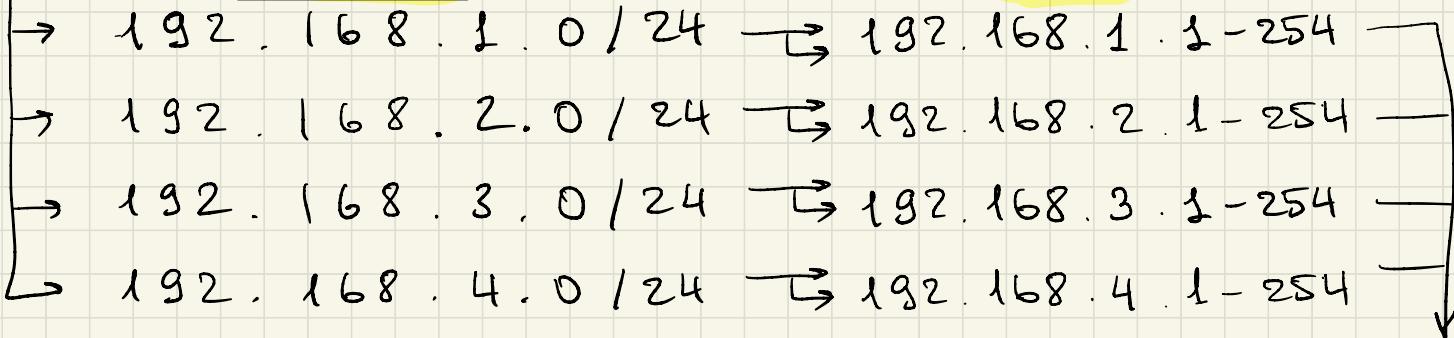


VPC

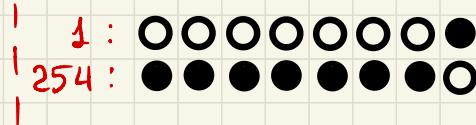
192 . 168 . 0 . 0 / 16



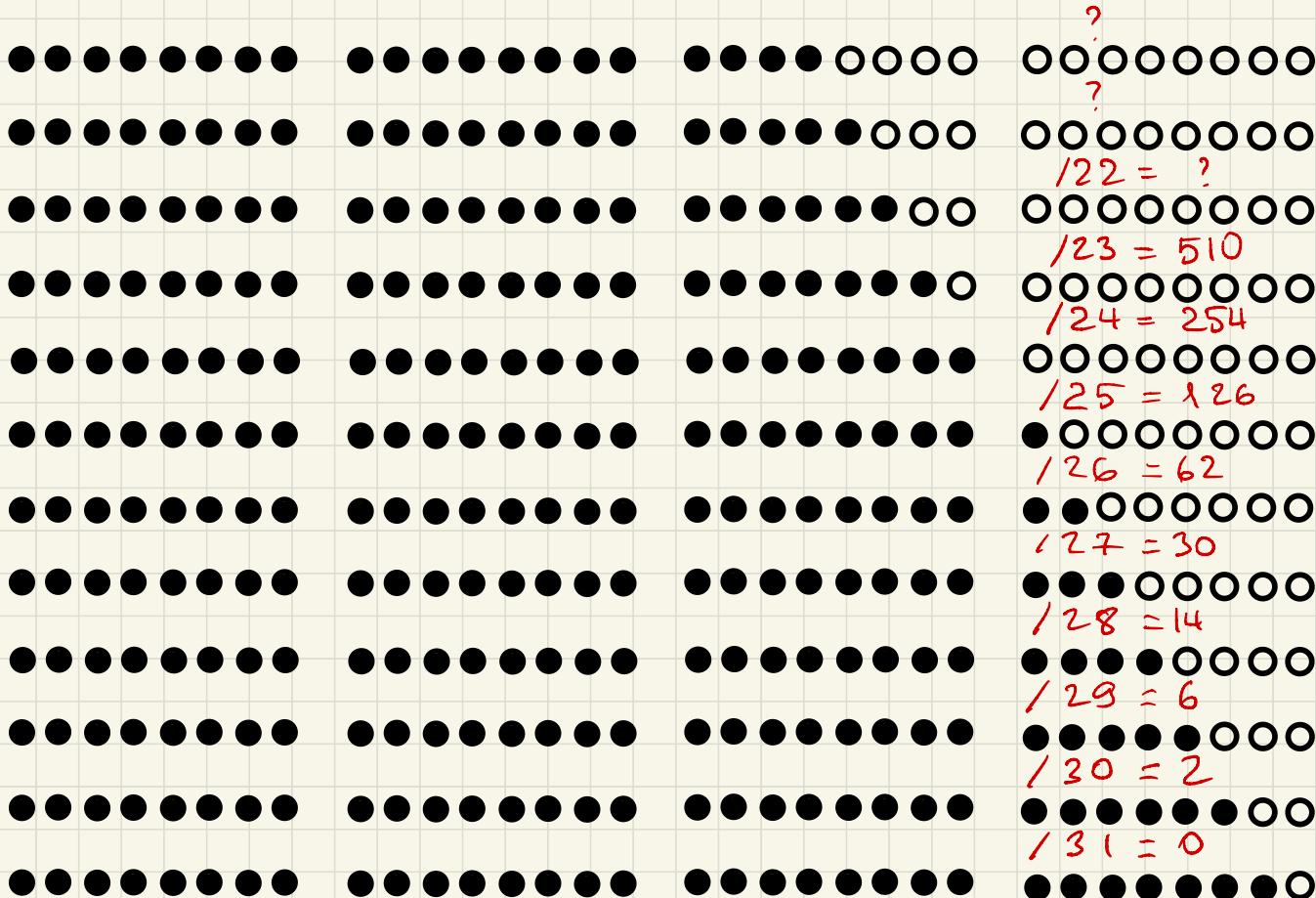
Subnets



VMs



Masks & CIDRs



Private Address Ranges

10.0.0.1 - 10.255.255.255

172.16.0.0 - 172.31.255.255

192.168.0.0 - 192.168.255.255

