1. Let an IP address 192.168.0.0/24, for this IP address find out the 64 subnet mask and first usable IP.
   Ans:

$SM = 255.255.255.252$

$IP = 192.168.0.1/30$

2. Find the subnet and host number of 255.255.240.0 ↙SM
   Ans:

   ~~# SN : $2^4 = 16$~~ , $SA: 128.0.0.0/20$

   $\# H : 2^{12} - 2 = 4094$

3. Given a network address 172.16.0.0 where 512 subnets and 100 hosts per subnet are needed. What should be the subnet mask? 2^9 2^7
   Ans:

   $255.255.255.128$

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