

#1.  
CIDR Notation: 192.168.11.25/23

How to computer the Subnet mask from the given cidr notation?  
Here they gave 23 bits to network address based on the above cidr notation which means out 32 bits the 23 bits should be represented with 1's using which computer the subnet mask as below

1	1	1	1	1	1	1	1	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
-----								-----								-----								-----											
255								.	255								.	254								.	0								

Subnet mask for the above ip address is = 255.255.254.0

once we have the submask, we can compute the network and host address from it as below:

1. represent the ip address in binary form

2. represent subnet mask in binary form

Then do an bit-wise AND operation and derive the bit values until the network bits are allocated for that ip address

ip:	1	1	0	0	0	0	0	0	0	.	1	0	1	0	1	0	0	0	.	0	0	0	0	1	0	1	1	1	0	0	0	0	1		
subnet mask:	1	1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	0		
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	1	1	0	0	0	0	0	0	0	.	1	0	1	0	1	0	0	0	.	0	0	0	0	1	0	1	1	0	0	0	0	0			
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	192								.	168								.	10								.	0							

network address: 192.168.10.0/23

max hosts: 512

starting ip: 192.168.10.0

ending ip: 192.168.11.255

subnet mask: 255.255.254.0

#2  
CIDR Notation: 152.111.13.52/21

1.  
compute subnet mask: turn-on 21 bits out of 32 as below

1	1	1	1	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
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255								.	255								.	248								.	0							

Subnet Mask: 248

2. Compute Network address from subnet mask

ip:	1	0	0	1	1	0	0	0	.	0	1	1	0	1	1	1	1	1	1	.	0	0	0	0	0	1	1	0	1	0	0	0			
	1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	1	1	.	1	1	1	1	1	0	0	0	0	0	0	0			
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	1	0	0	1	1	0	0	0	.	0	1	1	0	1	1	1	1	1	.	0	0	0	0	0	1	1	1	1	1	1	1	1			
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	152								.	111								.	8								.	0							

Network address: 152.111.8.0/21

Subnet mask: 255.255.248.0

Min Ip: 152.111.8.0

Max Ip: 152.111.15.255

Max Hosts: 2048