Exercise 1- Subnetting exercises.

Write the subnet, broadcast address, and valid host range for question 1 through question 6:

1. 192.168.100.25/30
2. 192.168.100.37/28
3. 192.168.100.66/27
4. 192.168.100.17/29
5. 192.168.100.99/26
6. 192.168.100.99/25
7. You have a Class B network and need 29 subnets. What is your mask?
8. What is the broadcast address of 192.168.192.10/29?
9. How many hosts are available with a Class C /29 mask?
10. What is the subnet for host ID 10.16.3.65/23?

Given a Class B network and the net bits identified (CIDR), complete the following table to identify the subnet mask and the number of host addresses possible for each mask.

Classful Address	Subnet Mask	Number of Hosts per Subnet ($2^x - 2$)
/16	255.255.0.0	65,534
/17		
/18		
/19		
/20		
/21		
/22		
/23		
/24		
/25		
/26		
/27		
/28		
/29		
/30		

Complete the following table

IP Address	Class	Nº Subnet and Host Bits	Nº Subnets	Nº Hosts
10.25.66.154/23	A	15 / 9	32768	510
172.31.254.12/24				
192.168.20.123/28				
63.24.89.21/18				
128.1.1.254/20				
208.100.54.209/30				