CS 372 Introduction to Computer Networks
Self-Check Exercises: Lecture 27

1) What is a subnet?

2) What are the two addresses in a subnet which are reserved, and what are they reserved for?

3) Fill in the following table.

IPv4 CIDR Address	Netmask (dotted decimal)	Network Address	Broadcast Address	Host Number	Total count of host addresses in network
`128.193.43.35 /16`					
	`255.255.240.0`	`128.193.224.0`		`500`	
`128.193.43.35 /23`					
`128.193.43.35 /26`					

4) Given the network address "block" 128.193.0.0 /16. Suppose that we want to split all of the addresses into 4 equal-sized subnets.
   a. What are the network addresses of each subnet

b. What are the netmasks for each subnet?

c. How many host addresses can be assigned in each subnet?

5) What is a *next-hop* router?