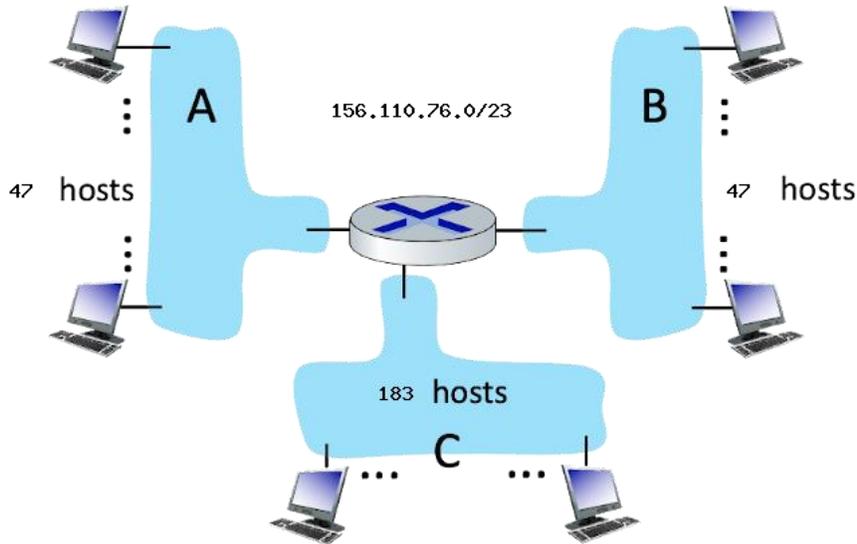




Birzeit University
Faculty of Engineering and Technology
Department of Electrical and Computer Engineering
ENCS3320 – Computer Networks (Term 1241)

Name: _____ **ID:** _____ **Section:** _____

Consider the router and the three attached subnets below (A, B, and C). The number of hosts is also shown below. The subnets share the 23 high-order bits of the address space: 156.110.76.0/23. Assign subnet addresses to each of the subnets (A, B, and C) so that the amount of address space assigned is minimal, and at the same time leaving the largest possible contiguous address space available for assignment if a new subnet were to be added. Then answer the questions below.



- 1) Is the address space public or private?
- 2) How many hosts can there be in this address space?
- 3) What is the subnet address of subnet A? (CIDR notation)
- 4) What is the broadcast address of subnet A?
- 5) What is the starting address of subnet A?
- 6) What is the ending address of subnet A?
- 7) What is the subnet address of subnet B? (CIDR notation)
- 8) What is the broadcast address of subnet B?
- 9) What is the starting address of subnet B?
- 10) What is the ending address of subnet B?
- 11) What is the subnet address of subnet C? (CIDR notation)
- 12) What is the broadcast address of subnet C?
- 13) What is the starting address of subnet C?
- 14) What is the ending address of subnet C?

GOOD LUCK