

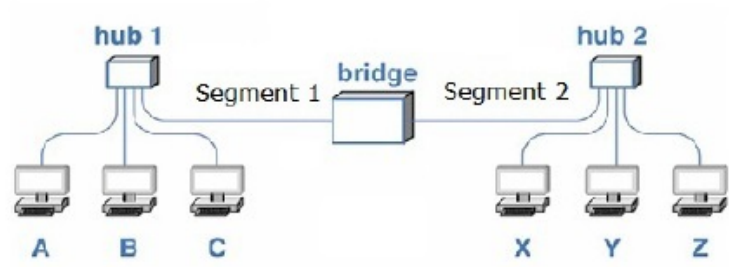
Quiz 4: October 30, 2014

Left Neighbor: _____

Right Neighbor: _____

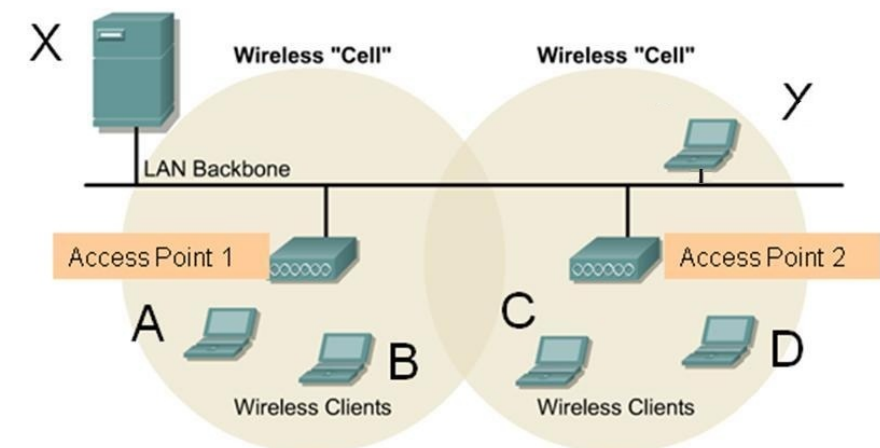
This is a closed book quiz

1. (3 points) In the picture below you see a bridge connecting Segment 1 and Segment 2 as well as a list of packets sent on the small LAN. After each of the packers is sent, what are the MAC addresses that the bridge will have learned is assigned to each segment? (For example, the answer for the first row should be an A listed under Segment 1, and nothing listed under Segment 2. The A for Segment 1 will appear in every row, because the bridge will never unlearn that.)



Packet sent	Segment 1	Segment 2
from A to B		
from B to A		
broadcast from A		
from Y to X		
from Y to A		
from A to B		

2. (7 points) Below is a small LAN including wired and wireless computers. Please give all pertinent addresses (just the addresses–I only drew the full packet for familiarity) for as many packets as you need first, if Computer C sends a message to Computer A (4 points) and Second if Computer D sends to Computer X (3 points). For an Ethernet packet, give DA and SA, and for an 802.11 packet, give Addresses 1 through 3.



		Address 1	Address 2	Address 3		Address 4	Data or Payload	
2 Bytes	2 Bytes	6 Bytes	6 Bytes	6 Bytes	2 Bytes	6 Bytes	0 - 2312 Bytes	4 Bytes

		Destination Address	Source Address		Data or Payload	
56 Bits	8 Bits	48 Bits	48 Bits	16 Bits	Up to 1500 Bytes	32 Bits

- (a) X to D:
(b) C to B: