

HW # 2: CSE160 - 4

- 3.17:-
- a) When a packet is being sent from X to W the packet is forwarded to all the bridges. Since the packet traverses all bridges, so all bridges learn the position of X. Y's network interface would be able to see the packet
 - b) When a packet is being sent from Z to X the packet is forwarded to all the bridges. Since the packet traverses all bridges, so all bridges learn the position of Z. The packet would not be visible to Y's network interface as B2 will only forward the packet on the B1 link
 - c) When a packet is being sent from Y to X, the packet is forwarded to B2, which in turn forwards it to B1 and finally the packet is forwarded to X. Thus, bridges B2 and B1 learn position of Y. The wouldn't be visible to Z's network interface
 - d) When a packet is being sent from Z to Y, B3 does not where Y is and hence retransmits the packet on all links. After the packet arrives at B2 it is retransmitted only to Y as B2 knows location of Y. All bridges learn the position of Z. The packet would not be visible to Z's network

3.31:- It is necessary to have one address

* The point to point is used to provide a connection on a link only between 2 devices. It is used to transfer the non-IP packets through the link between the devices. That means, the packets without addresses can also be sent using the point to point link to network. Furthermore, the IP tolerates the point to point interfaces that have nonunique addresses or no addresses