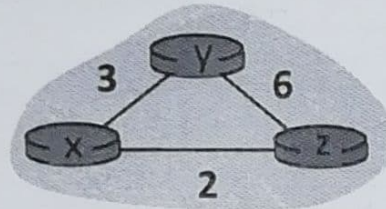


Answer the following Questions:

- Q1. Compare and contrast Link-state and Distance-vector routing algorithms. (4)
- Q2. Elaborate: RIP, OSPF, BGP, DHCP. (2)
- Q3. Consider the following three node topology. Compute the distance tables after the initialization step and after each iteration of a synchronous version of the distance-vector algorithm. (10)



Q4. Consider the network setup in the following figure. Suppose that the ISP assigns the router the address 24.34.112.235 and that the network address of the home network is 192.168.1/24.

- a. Assign addresses to all interfaces in the home network. (2)
- b. Suppose each host has one ongoing TCP connection, all to port 80 at host 128.119.40.86. Provide the three corresponding entries in the NAT translation table. (3)

