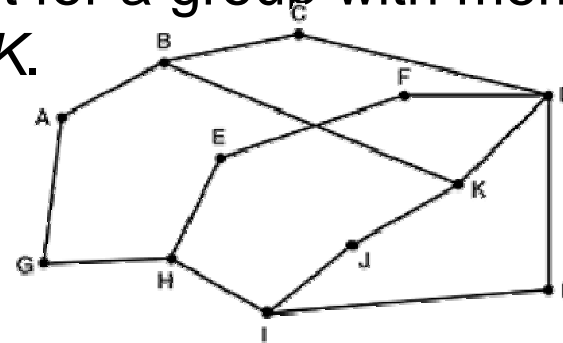


Lista de Exercícios 5

26. (Tanenbaum, Cap 5, #3) Datagram subnets route each packet as a separate unit, independent of all others. Virtual-circuit subnets do not have to do this, since each data packet follows a predetermined route. Does this observation mean that virtual-circuit subnets do not need the capability to route isolated packets from an arbitrary source to an arbitrary destination? Explain your answer.
27. (Tanenbaum, Cap 5, #9) Consider the subnet of Fig. 5-13(a). Distance vector routing is used, and the following vectors have just come in to router *C*: from *B*: (5, 0, 8, 12, 6, 2); from *D*: (16, 12, 6, 0, 9, 10); and from *E*: (7, 6, 3, 9, 0, 4). The measured delays to *B*, *D*, and *E*, are 6, 3, and 5, respectively. What is *C*'s new routing table? Give both the outgoing line to use and the expected delay.

Lista de Exercícios 5

28. (Tanenbaum, Cap 5, #10) If delays are recorded as 8-bit numbers in a 50-router network, and delay vectors are exchanged twice a second, how much bandwidth per (full-duplex) line is chewed up by the distributed routing algorithm? Assume that each router has three lines to other routers.
29. (Tanenbaum, Cap 5, #16) Compute a multicast spanning tree for router C in the following subnet for a group with members at routers A, B, C, D, E, F, I, and K.



30. (Tanenbaum, Cap 5, #39) A network on the Internet has a subnet mask of 255.255.240.0. What is the maximum number of hosts it can handle?