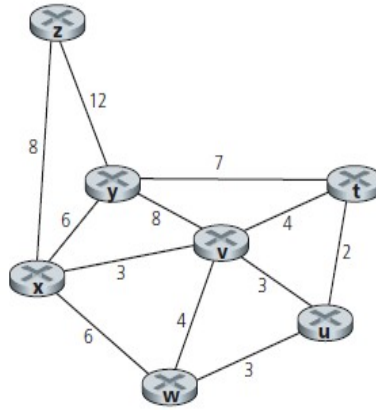
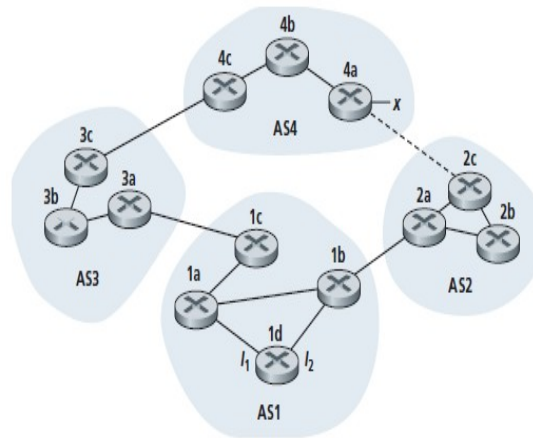


Q1: Consider the following network. With the indicated link costs, use Link State routing algorithm to compute the shortest path from t to all network nodes. Clearly show the table entries for computing the next node in the shortest path tree. Draw the final shortest path tree with all the costs.



Q2: Consider the network given below. Consider the network shown below. Suppose AS3 and AS2 are running OSPF for their intra-AS routing protocol. Suppose AS1 and AS4 are running RIP for their intra-AS routing protocol. Suppose eBGP and iBGP are used for the inter-AS routing protocol. Initially suppose there is *no* physical link between AS2 and AS4.



1. Router 3c learns about prefix x from which routing protocol: OSPF, RIP, eBGP, or iBGP?

Answer: _____

Reason:

2. Router 3a learns about x from which routing protocol?

Answer: _____

Reason:

3. Router 1c learns about x from which routing protocol?

Answer: _____

Reason:

4. Router 1d learns about x from which routing protocol?

Answer: _____

Reason: