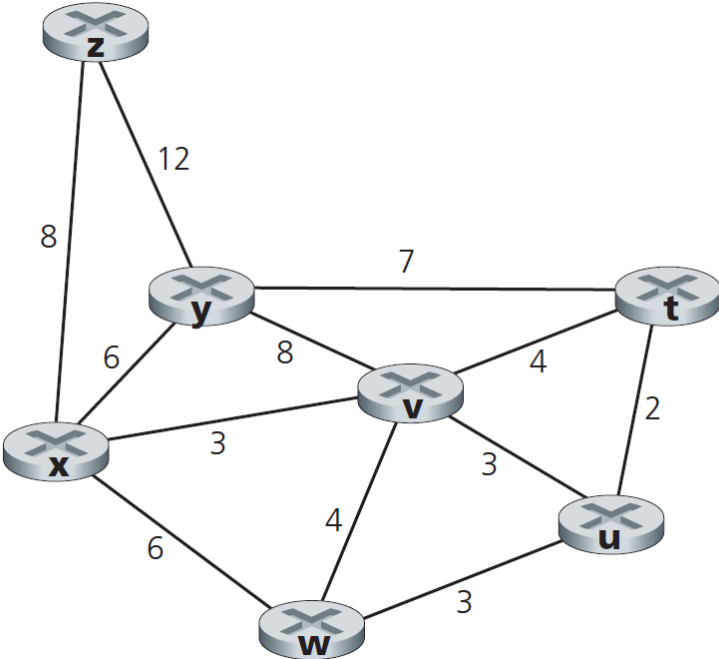


P3 Consider the following network. With the indicated link costs, use Dijkstra's shortest-path algorithm to compute the shortest path from x to all network nodes. Show how the algorithm works by computing a table similar to Table 5.1.



Step	N'	D(t),p(t)	D(u),p(u)	D(v),p(v)	D(w),p(w)	D(y),p(y)	D(z),p(z)
0							
1							
2							
3							
4							
5							
6							

P5 Consider the network shown below, and assume that each node initially knows the costs to each of its neighbors. Consider the distance-vector algorithm and show the distance table entries at node z.

(提示：假设采用同步方式计算，给出初始以及之后每一轮的节点 z 的距离表。第 i 轮，节点 z 从邻居收到的距离向量为到目的地最多经过 i 跳的路由，而节点 z 的距离向量为最多经过 i+1 跳的路由。)

距离表可采用下述格式描述，前面两行为 v 和 x 发给节点 z 的距离向量，而最后一行 z 为节点计算出来的距离向量

目的	u	v	x	y	z
v					
x					
z					

