

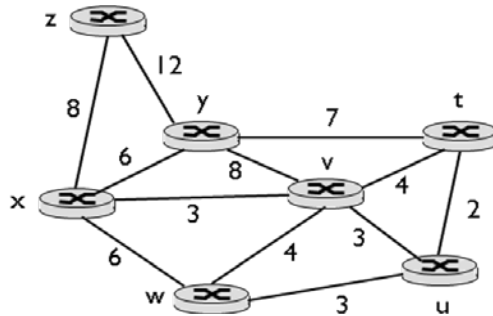
**CS320: Internetworking
Fall 2021**

Review Quiz #8

- Name only: _____
- Release date: Nov 03, 2021
- Total 5 pts

I. 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 the Table below.

[5 pts]



step	N'	$D(v),p(v)$	$D(w),p(w)$	$D(x),p(x)$	$D(y),p(y)$	$D(z),p(z)$
0	u	<u>2,u</u>	<u>5,u</u>	<u>1,u</u>	∞	∞
1	ux	<u>2,u</u>	<u>4,x</u>		<u>2,x</u>	∞
2	uxy	<u>2,u</u>	<u>3,y</u>			<u>4,y</u>
3	uxyv		<u>3,y</u>			<u>4,y</u>
4	uxyvw					<u>4,y</u>
5	uxyvwz					