

Networks HW 4

(R14)

IP : 192.168.1.17
Subnetmask : 255.255.255.0
Default Router : 192.168.1.254
local DNS server : 192.168.1.2

(R15)

- An IP diagram sent from Source to dest. host will travel over 8 interfaces
- 3 forwarding tables will be indexed to move the data gram from Source to destination

(R16)

Suppose app generates 40 bytes every 20 ms -
each chunk gets encapsulated in a TCP segment
to then IP datagram

So, TCP segments are 20 bytes each

Assume 40 added to each chunk $= 2 \times 40 = 80$ bytes Total

So 50% will be app data

(R18)

wireless Router usually includes DHCP server,
DHCP used to assign IP addr to S PC's
to router interface. Yes wireless also
uses NAT to obtain only 1 IP addr from ISP

P27

a)

Num	N'	D(w), p(w)	D(v), p(v)	D(u), p(u)	D(x), p(x)	D(y), p(y)	D(z)
0	t	2, t	4, t	∞	∞	7, t	∞
1	tu	2, t	4, t	5, u	∞	7, t	∞
2	tuv	2, t	4, t	5, u	7, v	7, t	∞
3	tuvw	2, t	4, t	5, u	7, v	7, t	∞
4	tuvwxy	2, t	4, t	5, u	7, v	7, t	15, x
5	tuvwxyz	2, t	4, t	5, u	7, v	7, t	15, x
6	tuvwxyz	2, t	4, t	5, u	7, v	7, t	15, x

b)

0	u	2, u	3, w	3, u	∞	∞	∞
1		2, u			∞	9, t	∞
2		2, u			6, v		∞
3		2, u					∞
4		2, u					14, x
5		2, u					14, x
6		2, u					14, x

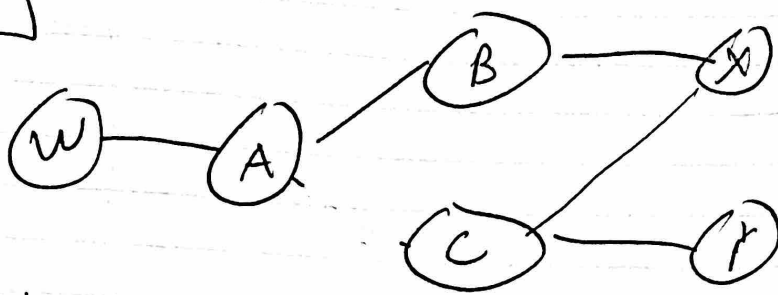
c)

0	v	4, v	3, v	4, v	3, v	8, v	∞
1							11, x
2							
3							
4							
5							
6							

d)

0	w	-	3, w	4, w	6, w	∞	∞
1		5, u				∞	∞
2						12, v	∞
3							∞
4							14, x
5							14, x
6							14, x

p40



No connection btwn A and C so syst X
has no knowlage of AC link. The dest. path
has no data about the paths AS A → A S C