

Homework 2 Problem 5**H1**

Destination	Next Hop	Interface
129.186.5.0/24	129.186.5.30	eth0
127.0.0.1	127.0.0.1	lo0
Default	129.186.5.254	eth0

H2

Destination	Next Hop	Interface
129.186.5.0/24	129.186.100.254	eth0
129.186.4.0/24	129.186.100.253	eth0
129.186.100.0/24	129.186.100.40	eth0
127.0.0.1	127.0.0.1	lo0
Default	129.186.100.252	eth0

H3

Destination	Next Hop	Interface
129.186.4.0/24	129.186.4.133	eth0
127.0.0.1	127.0.0.1	lo0
Default	129.186.4.254	eth0

R1

Destination	Next Hop	Interface
129.186.5.0/24	129.186.5.254	en0
129.186.4.0/24	129.186.100.253	en1
129.186.100.0/24	129.186.100.254	en1
127.0.0.1	127.0.0.1	lo0
Default	129.186.100.252	en1

R2

Destination	Next Hop	Interface
129.186.5.0/24	129.186.5.254	en0
129.186.4.0/24	129.186.4.254	en1
129.186.100.0/24	129.186.100.253	en0
127.0.0.1	127.0.0.1	lo0
Default	129.186.100.252	en0

R3

Destination	Next Hop	Interface
129.186.5.0/24	129.186.100.254	en0
129.186.4.0/24	129.186.100.253	en0
129.186.100.0/24	129.186.100.252	en0
127.0.0.1	127.0.0.1	lo0
Default	10.0.0.5	en1

Homework 2 Problem 6

Layer	Field Name	Original	Fragment 1	Fragment 2
Ethernet	Destination	N/A	00:7c:23:33:19:AA	00:7c:23:33:19:AA
	Source	N/A	00:80:08:45:22:FF	00:80:08:45:22:FF
	Type Field	N/A	0x0800	0x0800
	Ver/IHL	4 5	4 5	4 5
	Type		0	0
IP	Len		2740	1500
	ID		3486	3486
	Flags	0 0 0	0 0 1	0 0 0
	Offset		0	185
	TTL		150 Computed	Computed
	Protocol		17	17
	Checksum	Computed	Computed	Computed
	Source IP	129.186.5.4	129.186.5.4	129.186.5.4
	Destination IP	68.10.7.4	68.10.7.4	68.10.7.4
	Data	2700 bytes	1480 bytes	1220 bytes

Homework 2 Problem 9

Not sure what f means, but I assumed it meant H6 to H7

a. 2. 1 for H5, 1 for the rest

H3->H1

c.6

d 9

e. 8

H6->H7

c.4

d. 5

e. 8

Sheet2

Lab Experiments (Using Spock)

1

IP: 129.186.215.40
Netmask:255.255.255.224

2-5

2

3

Site	Nslookup Address	Average Ping Time
a. www.nasa.gov	208.111.171.236	29.361
b. www.iac.iastate.edu	129.186.105.22	0.84
c. www.cnn.com	157.166.226.26	50.04
d. www.iseage.org	129.186.205.33	0.618
e. www.iastate.edu	129.186.23.166	6.211
f. bones.ee.iastate.edu	129.186.215.41	8.587

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IP Address	
129.186.215.42	sarek.ee.iastate.edu
129.186.215.43	sulu.ee.iastate.edu
129.186.215.44	mccoy.ee.iastate.edu
129.186.105.22	dougsmac.ece.iastate.edu
129.186.1.99	thumb.iastate.edu
208.111.171.200	Https-208-111-171-200.ord.llnw.net
208.111.150.102	Prod-mon-002.sjc1.yumenetworks.com

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Router Number	Router IP	Average Ping Time (ms) (-s 50)
1	129.186.215.62	0.778
2	129.186.105.253	0.939
3	129.186.254.131	0.927
4	192.245.179.54	4.631
5	192.245.179.163	0.903

Sheet2

4		5	6
Gateway		Ethernet addresses	Mail Server
129.186.215.62 (default)	bce1	fe80::222:19ff:fead:59d7	208.111.171.236
129.186.215.62 (default)	bce1	fe80::222:19ff:fead:59d7	129.186.5.3
129.186.215.62 (default)	bce1	fe80::222:19ff:fead:59d7	208.78.70.4
129.186.215.62 (default)	bce1	fe80::222:19ff:fead:59d7	129.186.205.33
129.186.215.62 (default)	bce1	fe80::222:19ff:fead:59d7	129.186.140.10
Link #1	bce0	fe80::222:19ff:fead:59d9	No answer (migh

Average Ping Time (ms) (-s 500) Average Ping Time (ms) (-s 1000)

1.159 1.549
 1.229 0 (packet lost)
 1.296 0 (packet lost)
 7.352 0 (packet lost)
 1.263 0 (packet lost)

t be above)