Week 7 Summary Exercises

Due Nov 17 at 11:59pm **Points** 72

nts 72 Questions 27

Available Nov 10 at 12am - Nov 17 at 11:59pm 8 days

Time Limit 360 Minutes

Allowed Attempts 2

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	81 minutes	72 out of 72
LATEST	Attempt 2	81 minutes	72 out of 72
	Attempt 1	269 minutes	66.33 out of 72

Score for this attempt: **72** out of 72

Submitted Nov 17 at 11:12pm This attempt took 81 minutes.

Question 1 1 / 1 pts

In network-assisted congestion control, flags may be set during transit which indicate the presence and/or level of congestion in certain portions of the network.

Answer 1:

Correct!

Correct!

network-assisted

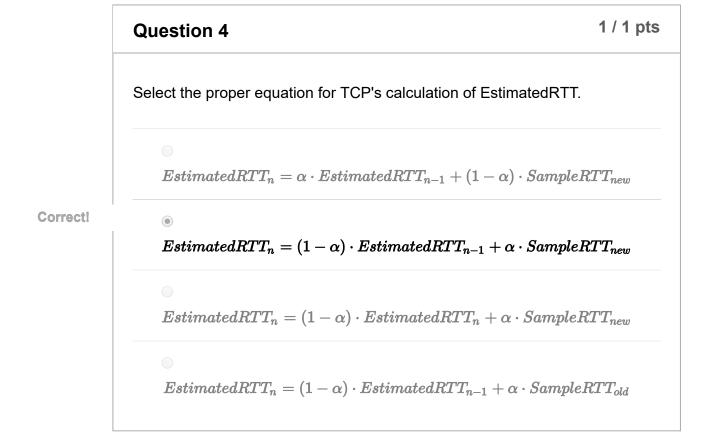
Question 2 What are some causes of network congestion? (Check all that apply) Typical Internet Usage.

Question 3 1/1 pts The rate of CongWin size increase (in terms of MSS) while in TCP's Slow-Start phase is Exponential .

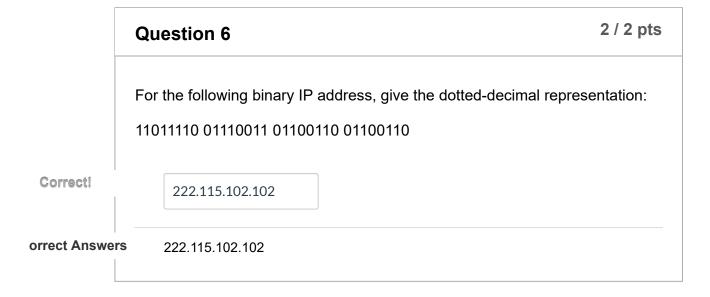
Answer 1:

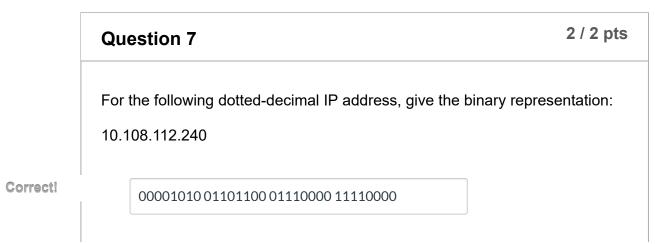
Correct!

Exponential



Question 5 Imagine a mythical set of protocols with the following details. Maximum Link-Layer data frame: 1,499 bytes Network-Layer header size: 29 bytes Transport-Layer header size: 23 bytes What is the size, in bytes, of the MSS? (Give answer without units) Correct! 1,447 orrect Answer 1,447





orrect Answers

00001010 01101100 01110000 11110000 000010100110110001111000011110000

Question 8

2 / 2 pts

For the following binary IP address, give the dotted-decimal representation: 10011000 11101110 10011101 11000011

Correct!

152.238.157.195

orrect Answers

152.238.157.195

Question 9

2 / 2 pts

When a host in a network needs to obtain a valid IP address for itself, it broadcasts a "discover" message that can be handled by a Dynamic Host Configuration Protocol (DHCP) server, which will "offer" an IP address within the correct domain.

Answer 1:

Correct!

Dynamic Host Configuration Protocol (DHCP)

Question 10

2 / 2 pts

In a datagram network, the responsibilities of the network layer include: (check all that apply).

flow control

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	connection setup/takedown
	reliable delivery
Correct!	✓ host-to-host communication
	congestion control
Correct!	packet forwarding
Correct!	✓ packet routing
	payload error correction

	Question 11 2 / 2 pts
	Which of the following are benefits of a datagram network? (Check all that apply)
Correct!	Faster delivery.
	Connection states are preserved.
	Guaranteed timing.
Correct!	✓ Less overhead than a VC network.
	Guaranteed bandwidth.

Question 12 2 / 2 pts

In a subnet, the reserved addresses are the subnet address (with a lowest subnet IP address) and the broadcast address (with a highest subnet IP address).

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	Answer 1:	
Correct!	subnet address	
	Answer 2:	
Correct!	broadcast address	
	Question 13	2 / 2 pts
	The Internet Protocol (IP) implements timing controls.	
	O True	
Correct!	False	
	Question 14	2 / 2 pts
	The process of determining a path through the internet is called	routing .
	Answer 1:	
Correct!	routing	
	Question 15	2 / 2 pts
	Where do network-layer protocols run?	
Correct!	✓ Routers	
Correct!	PCs	

Less overhead than a datagram network.

Correct!

Guaranteed timing.

Question 19 2 / 2 pts

Given a router with 5 input ports and 5 output ports. If the switching fabric is 5 times as fast as the input/output line speed, queueing can occur at an input port.

Answer 1:

Correct!

can

Question 20 2 / 2 pts

In addition to a "default" entry, routing tables in an internet store...

all of the above

Correct!

- the "first hop" in a path to each of the networks known to the router
- a complete path to each of the networks known to the router

the number of hops in the shortest path to each of the networks known to the router

Question 21 2 / 2 pts

Correct!

	The Internet Protocol (IP) implements congestion control.
	True
Correct!	False

Question 22 Given a router with 5 input ports and 5 output ports. If the switching fabric is 5 times as fast as the input/output line speed, queueing can occur at an output port. Answer 1: can

Question 23 4 / 4 pts

Upon encountering a router with the following routing table:

Prefix Match		Port
10011110 00011110 10001111		0
10011110 00011110 10001111	000	1
10011110 00011110 10001111	01	2
10011110 00011110 10001110	0001	3
Default		4

A datagram with the destination IP address 158.30.143.80 would be routed to Port 2 .

Answer 1:

Correct!

Port 2

Question 24 4 / 4 pts

Upon encountering a router with the following routing table:

Prefix Match	Port
10011110 00011110 10001111	0
10011110 00011110 10001111 000	1
10011110 00011110 10001111 01	2
10011110 00011110 10001110 0001	3
Default	4

A datagram with the destination IP address 158.30.142.30 would be routed to Port $\bf 3$.

Answer 1:

Correct!

Port 3

Question 25 4 / 4 pts

Upon encountering a router with the following routing table:

Pre	fix Match	Port
10011110 00011110	10001111	0
10011110 00011110	10001111 000	1
10011110 00011110	10001111 01	2
10011110 00011110	10001110 0001	3
Default		4

/17/2019	Week 7 Summary Exercises: INTRO TO COMPUTER NETWORKS (CS_372_400_F	
	A datagram with the destination IP address 158.30.143.150 would be routed	
	to Port 0.	
	Answer 1:	
Correct!	Port 0	

	Question 26	10 / 10 pts
	For the IPv4 CIDR address 153.10.22.56 /22	
	What is the	
	Netmask: 255.255.252.0	
	Network Address: [Select]	
	Host Mask: [Select]	
	Broadcast Address: [Select]	
	Number of possible hosts: 1022	
	Host Number: [Select]	
	Answer 1:	
Correct!	255.255.252.0	
	Answer 2:	
Correct!	153.10.20.0	
	Answer 3:	
Correct!	0.0.3.255	
	Answer 4:	
Correct!	153.10.23.255	
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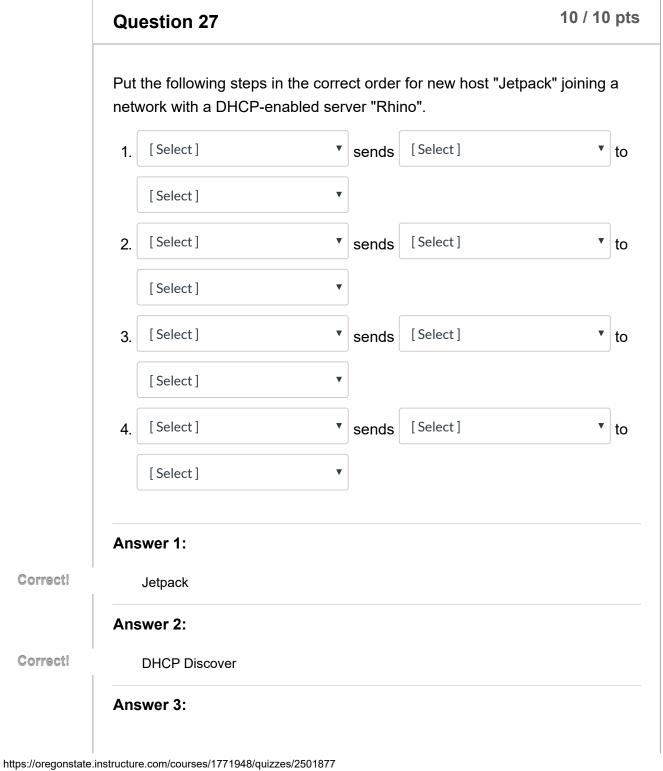
11/17/2019

1022

Answer 6:

Correct!

568



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Correct!	IP broadcast address
	Answer 4:
Correct!	Rhino
	Answer 5:
Correct!	DHCP Offer
	Answer 6:
Correct!	IP broadcast address
	Answer 7:
Correct!	Jetpack
	Answer 8:
Correct!	DHCP Request
	Answer 9:
Correct!	IP broadcast address
	Answer 10:
Correct!	Rhino
	Answer 11:
Correct!	DHCP Ackknowledgement
	Answer 12:
Correct!	IP broadcast address

Quiz Score: 72 out of 72