

Week 4 Summary Exercises

Due Oct 27 at 11:59pm**Points** 48**Questions** 23**Available** Oct 20 at 12am - Oct 27 at 11:59pm 8 days**Time Limit** 360 Minutes**Allowed Attempts** 2[Take the Quiz Again](#)

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	125 minutes	48 out of 48

Score for this attempt: **48** out of 48

Submitted Oct 27 at 1:38pm

This attempt took 125 minutes.

Question 1**2 / 2 pts**

The reserved port for SMTP is port 25 .

Answer 1:

25

Correct!**Question 2****2 / 2 pts**

The SMTP e-mail protocol is called a Push protocol.

Answer 1:

Push

Correct!

Question 3**2 / 2 pts**

A client-side piece of data which is used to keep track of transactions between a client and server is called a cookie.

Correct!☒ True☐ False**Question 4****2 / 2 pts**

The reserved port for HTTP is port 80 .

Correct!**Answer 1:**

80

Question 5**2 / 2 pts**

The reserved port for FTP data transfer is port 20 .

Correct!**Answer 1:**

20

Question 6**1 / 1 pts**

Compute the sum with carry-wraparound (sometimes called the one's complement sum) of the following two numbers. Give answer in 8-bit binary,

zero-padded to 8 bits if necessary, with no spaces (e.g. 00101000). Please note this is different than the checksum calculation.

NOTE: Canvas will remove any leading zeros from your answer. This will not cause your answer to be marked as incorrect.

```
10010110
10011100
```

Correct!

110,011

Correct Answers

110,011 (with margin: 0)

Question 7

1 / 1 pts

Compute the sum with carry-wraparound (sometimes called the one's complement sum) of the following two numbers. Give answer in 8-bit binary, zero-padded to 8 bits if necessary, with no spaces (e.g. 00101000). Please note this is different than the checksum calculation.

NOTE: Canvas will remove any leading zeros from your answer. This will not cause your answer to be marked as incorrect.

```
10000011
10000000
```

Correct!

100

Correct Answers

100 (with margin: 0)

Question 8

2 / 2 pts

The TCP protocol provides error detection and correction.

☐ True

Correct!☒ False**Question 9****2 / 2 pts**

The one's complement of 01101001 is 10010110

Answer 1:**Correct!**

10010110

Question 10**2 / 2 pts**

If I want to be sure I don't overwhelm the receive host with too much information, I would use the TCP protocol.

Answer 1:**Correct!**

TCP

Question 11**2 / 2 pts**

The network layer manages communications from host to host .

Answer 1:**Correct!**

host

Answer 2:**Correct!**

host

Question 12**2 / 2 pts**

The UDP protocol provides unreliable, connectionless service.

Correct!☒ True☐ False**Question 13****2 / 2 pts**

The TCP protocol uses a [Select] -bit, 1 's complement of the [Select] 's complement sum to compute the checksum.

Answer 1:**Correct!**

16

Answer 2:**Correct!**

1

Answer 3:**Correct!**

1

Question 14**2 / 2 pts**

A simple checksum can detect some 2-bit errors.

Correct!☒ True

☐ False

Question 15**2 / 2 pts**

If I were going to implement a lossy VoIP connection, I would use the UDP protocol.

Answer 1:

UDP

Correct!

Question 16**2 / 2 pts**

The transport layer manages communications from process to process .

Answer 1:

process

Correct!

Answer 2:

process

Correct!

Question 17**2 / 2 pts**

The TCP protocol provides reliable, connection-oriented service.

☒ True

☐ False

Correct!

Question 18**2 / 2 pts**

The TCP protocol provides reliable, connectionless service.

☐ True☒ False**Correct!****Question 19****2 / 2 pts**

Suppose that a client application sends a request to a server application at port 80 on a remote server. The server responds to the client's address at

☐ port 80; the client port is always the same as the server port.☐ a port number calculated by the server and assigned to the client; this calculation is based on the client address, and is sent to the client along with the server's response.☒ a port number assigned by the client's operating system; this number is not used directly by the client application, but is sent to the server along with the original request.☐ none of the above**Correct!****Question 20****2 / 2 pts**

The UDP protocol provides reliable, connectionless service.

Correct!☐ True☒ False**Question 21****2 / 2 pts**

The one's complement of 10010110 is 01101001

Answer 1:**Correct!**

01101001

Question 22**4 / 4 pts**

Server X is running Xbox Live services on port #3072. Client A is running an application that uses port #1796 to request an Xbox Live TCP connection to Server X. Client B is running an application that uses port #2076 to request an Xbox Live TCP connection to Server X.

IP addresses:

- Server X: 201.164.10.123
- Client A: 128.193.11.113
- Client B: 128.193.45.227

Client B starts a second application (running at the same time as the first application) that uses the next incremental port number to request an Xbox Live TCP connection to Server X. The connection created for Client B is identified by the sockets at the endpoints as follows:

	IP Address	Port Number
On Client B	<input type="text" value="[Select]"/>	<input type="text" value="[Select]"/>
On Server	128.193.45.227	<input type="text" value="[Select]"/>

X

Answer 1:**Correct!**

201.164.10.123

Answer 2:**Correct!**

3072

Answer 3:**Correct!**

128.193.45.227

Answer 4:**Correct!**

2077

Question 23**4 / 4 pts**

Server X is running Diablo II services on port #4000. Client A is running an application that uses port #450 to request an Diablo II TCP connection to Server X. Client B is running an application that uses port #455 to request an Diablo II TCP connection to Server X.

IP addresses:

- Server X: 152.111.20.36
- Client A: 113.13.131.10
- Client B: 114.192.111.23

Client A starts a second application (running at the same time as the first application) that uses the next incremental port number to request an Diablo II TCP connection to Server X. The connection created for Client A is identified by the sockets at the endpoints as follows:

	IP Address	Port Number
On Client A	[Select] ▼	4000
On Server X	[Select] ▼	451

Correct!

Answer 1:

152.111.20.36

Correct!

Answer 2:

4000

Correct!

Answer 3:

113.13.131.10

Correct!

Answer 4:

451

Quiz Score: **48** out of 48