If a TCP socket is ready and listening for incoming connections, it's in the \_\_\_\_\_\_ state.

ESTABLISHED CLOSE\_WAIT SYN\_SENT LISTEN

The instantiation of an endpoint in a potential TCP connection is known as a \_\_\_\_\_\_.

socket port sequence number TCP segment

The sequence of SYN, SYN/ACK, and ACK packets is known as the \_\_\_\_\_\_\_\_\_.

three-way handshake four-way handshake two-way handshake high five

Application layer data lives in the \_\_\_\_\_ section of the transport layer protocol.

data payload header footer flags

How many bits are used to direct traffic to specific services running on a networked computer?

16 8 32 12

The transport layer handles multiplexing and demultiplexing through what type of device?

Routers Switches Hubs Ports

A connection has been terminated and no communication is possible. What is the Transmission Control Protocol (TCP) socket state?

FIN\_WAIT CLOSED FINISHED CLOSE\_WAIT

A device receives a Transmission Control Protocol (TCP) packet. The device understands where the actual data payload begins. Which portion of the TCP header provides this information?

Sequence number Data offset Acknowledgement number Checksum

Which field in a Transmission Control Protocol (TCP) header is not typically used in modern networking? Checksum Acknowledgement number Sequence number Urgent pointer

The checksum doesn't compute for a packet sent at the Internet Protocol (IP) level. What will happen to the data?

The data will be sent back to the sending node with an error. It will be sent, but may be out of order. The data will be resent. The data will be discarded.

A communication sent through Transmission Control Protocol (TCP) arrives out of order. What allows the data to be put back together in the correct order?

Checksum Preamble Acknowledgement number Sequence numbers

How many Transmission Control Protocol (TCP) control flags are there?

7 8 5 6

One side in a Transmission Control Protocol (TCP) connection has not been able to properly recover from a series of malformed segments. Which Transmission Control Protocol (TCP) flag will be used?

FIN RST PSH SYN

A device involved in a Transmission Control Protocol (TCP) connection is ready to close the connection. The other device in the connection agrees. What has occured?

Four-way handshake Two-way handshake Three-way handshake Handshake