

Question 1

Completed on College PC

Question 2

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Question 3 - Draw an IP Header.

Version 4.	IHL 0101: 20 bytes	TOS Default	Total Length 1500
Identification 0x8678 (34424)		Flags No flag 0x40	Fragment offset 0
TTL 113	Protocol TCP	Header checksum 0x6451	
Source Address 149.153.106.155.			
Dest. Address 40.127.240.158			
Options 0			
Data. Segment data (1460 bytes)			

Options was not appearing in the TCP Column

Question 4.

Version: This field indicates the format of the entire header

HL: HL is the Length of the internet header in 32 bit words that points to the beginning of the data.

TOS: The TOS field in IPv4 are used to classify IP packets so that routers can make QoS decisions about what path packets should traverse across the network.

Total Length: Total Length indicates the entire size of the IP packet in bytes. The min size is 20 bytes and max size is 65,535 bytes.

Identification: Identifies uniquely fragments of the packets and it is used to handle the re-assembling process

Flags: Flags field is used to control how a specific IP packet is treated by a device

Fragment offset: is used to indicate the starting position of the data in the fragment in relation to the start of the data in the original packet.

TTL: Value for the period of time that a packet, or data, should exist on a computer or network before being discarded.

Protocol: The method or protocol by which data is sent from one computer or another on the Internet.

Header checksum: A value calculated based on the contents of the IP header. Used to determine any error in transmission.

Source Address: The IP packet field containing the IP address of the workstation from which it came.

Destination Address: The address to which a frame or packet of data is sent over a network.

Options: Options provide special-delivery instructions to devices on the network, and can be used to dictate the route that a datagram must take, or to record the route that was taken or to provide other network-control services.

Data: Each IP packet containing both a header and data. The data is the actual content such as a string of letters or part of a webpage.

Question 5

Link provided not working.

Question 6.

Spideeman Remastered => Highly Realistic Graphics - Ray Tracing.

Escape from Tarkov => Realistic Mil Sim, With authentic Sounds, gunplay and healing mechanics.

Apex Legends => Unique Rewards via battlepass, playing Ranked mode competing with top ranking players.

Question 7.

Reddit, Instagram, Twitter, Tik Tok, PayPal, Revolut, Apple Music, Youtube, SNKRS, SNS, Amazon, Shop (Puts All Tracked orders in one place), Shazam, HomeKit App, Netflix.