Review: Week 02

Due Dec 10 at 11:59pm   **Points** 10   **Questions** 10

Available Dec 7 at 11:59pm - Dec 17 at 11:01pm   **Time Limit** None

Allowed Attempts Unlimited

Instructions

Quiz Instructions

After completing the related class lecture and assignments, take this quiz to verify your skill.

This quiz is "open book", but for you to work through on your own. Refer to your notes, use your standard resources, or reference online documentation as you like, but don't consult your classmates. It's not about what you have memorized, but about what you can figure out.

You can retake this quiz if needed, and your highest score will be your final grade. There is no time limit.

Good luck!

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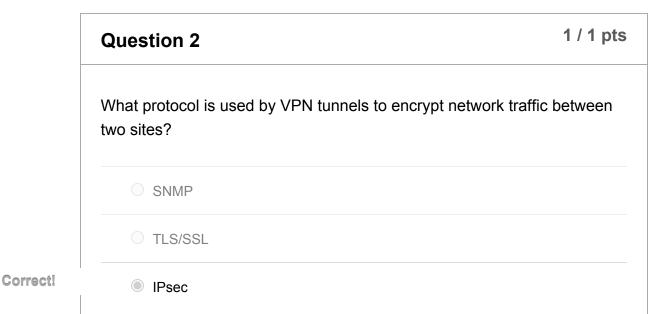Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	**Attempt 3**	1 minute	10 out of 10
LATEST	**Attempt 3**	1 minute	10 out of 10
	Attempt 2	2 minutes	9 out of 10
	Attempt 1	11 minutes	9 out of 10

Score for this attempt: **10** out of 10
Submitted Dec 8 at 3:21pm
This attempt took 1 minute.

Question 1   1 / 1 pts

What layer of the OSI model does the BlackDiamond 6800 belong to?

- ○ 4

- ○ 1

Correct!
- ◉ 3

- ○ 2

Question 2   1 / 1 pts

What protocol is used by VPN tunnels to encrypt network traffic between two sites?

- ○ SNMP

- ○ TLS/SSL

Correct!
- ◉ IPsec

○ SSH

Question 3   1 / 1 pts

Together, the data and ____ make a complete TCP/IP packet.

Correct!

◉ Headers

○ Frame

○ Wrapper

○ Encryption

Question 4   1 / 1 pts

PfSense is capable of acting as a _____ and a _____ without the installation of additional software packages.

☐ Cable Modem

Correct!

☑ Firewall

☐ Switch

Correct!

☑ Router

Question 5   1 / 1 pts

A hub has a single collision domain, whereas a switch has a collision domain for each port. What happens when data is transmitted on a hub?

- ☐ The packets don't collide with each other

- ☐ The packets are forwarded only to destination port

- ☐ The packets self-route to avoid collision

Correct!

- ☑ The packets are forwarded to all ports

Question 6   1 / 1 pts

Five computers are connected to a single switch, but the computers are not connected to each other. What network topology does this represent?

- ☐ Mesh

Correct!

- ☑ Star

- ☐ Ring

- ☐ Bus

Question 7   1 / 1 pts

The range of valid host IPs on a certain network is 172.16.0.1 - 172.16.255.254. What subnet class does this network belong to?

- ☐ Class C

Correct!

- ☑ Class B

☐ Class A

☐ Class D

Question 8   1 / 1 pts

What is the IP address, CIDR block, and subnet class of the binary value 00001010.00000001.01111001.00000000 if it is known that the number of possible hosts on this network is 67,108,864?

Correct!

☑ 10.1.121.0/6; Class A

☐ 10.1.0.121/6; Class A

☐ 10.1.121.0/16; Class B

☐ 10.1.0.121/16; Class B

Question 9   1 / 1 pts

After receiving multiple complaints that the company website is down, you analyze web server logs and discover a high volume of HTTP GET requests per second directed at the web server. On what layer of the OSI model is this denial-of-service attack taking place?

☐ Layer 3

☐ Layer 6

Correct!

☑ Layer 7

☐ Layer 5

Question 10   1 / 1 pts

You are the sysadmin for a company that utilizes Active Directory (AD) for identity management. Your security operations center (SOC) is dealing with a high volume of security alerts coming from mobile devices utilizing the company's private employee Wi-Fi network. The Wi-Fi network currently requires users to authenticate using a company-wide set of credentials given to all employees on a captive portal. What would be the best solution to increase accountability for Wi-Fi users on this network?

☐ Captive portal with a shorter usage duration until it prompts for authentication again

☐ Captive portal referencing FreeRADIUS integrated with pfSense local database; assign new unique credentials for each Wi-Fi user in addition to the AD credentials they already have

☐ Captive portal referencing FreeRADIUS integrated with pfSense local database; create accounts on the pfSense local database with same credentials as its corresponding AD account

Correct!   ☑ Captive portal referencing FreeRADIUS integrated with AD

Quiz Score: **10** out of 10