ICMP stands for \_\_\_\_\_\_\_\_.

Internet Control Message Protocol Internet Client Message Protocol Interactive Control Message Protocol Internet Control Mail Protocol

One of Google's public DNS servers is 8.8.8.8. The other one is \_\_\_\_\_\_.

0.0.0.0 255.255.255.255 8.8.4.4

With virtualization, a single physical machine, called a host, can run many individual virtual instances, called \_\_\_\_\_\_.

clients guests servers clouds

PaaS stands for \_\_\_\_\_\_.

Platform as a Service Packets as a Service Preamble as a Service Platform as a Schedule

The equivalent of the TTL field in an IPv4 header is known as the \_\_\_\_\_\_ field in an IPv6 header.

hop limit traffic class next header flow label

A Cyclical Redundancy Check (CRC) is an example of what type of built-in protocol mechanism? Check all that apply.



Error recovery

Correct

Right on! If a CRC value doesn't match, it is discarded. The transport layer will decide if the data needs to be resent.



Error detection

Correct

You got it! If a CRC value doesn't match, it is discarded. The transport layer will decide if the data needs to be resent.



Time To Live (TTL) expiration



Misconfiguration error

Most public Domain Name Servers (DNS) are available globally through which technology?

Anycast Echo request Time To Live (TTL) field Hosts file

Which option is NOT provided with cloud storage?

Physical hardware Security Accessibility Availability

How many zeros are found at the beginning of an Internet Protocol (IP) v6 address that correlate to a v4 address? 40 128 32 80

During a traceroute, which action does a router perform to the value in the Time To Live (TTL) field? Division Multiplication Subtraction Addition

Which addresses represent valid local loopback addresses? Check all that apply.



255.255.255.255



::1



::0



127.0.0.1

Internet Protocol (IP) v6 addresses are written out in which format?

8 groups of 16 bits 8 groups of 12 bits 4 groups of 16 bits 6 groups of 32 bits

For Internet Protocol (IP) v6 traffic to travel on an IP v4 network, which two technologies are used? Check all that apply.



Datagrams

Correct

Woohoo! IPv6 tunnel servers take incoming IPv6 traffic and encapsulate it within traditional IPv4 datagrams.



IPv6 tunnels

Correct

Awesome! An IPv6 tunnel is used to encapsulate data between IPv6 tunnel servers.



IPv4 Tunnels



Packets

When shortening an Internet Protocol (IP) v6 address, which two rules are used? Check all that apply.



Replace groups of zeros with colons.

Correct

Woohoo! Any number of consecutive groups composed of just zeroes can be replaced with two colons.



Removing all leading zeros.

Correct

Nice job! When shortening an IPv6 address, you can remove any leading zeros from a group.



Replace groups of ones with semicolons.



Removing all leading ones.