An ARP broadcast is sent to the special MAC address \_\_\_\_\_\_\_\_.

FF:FF:FF:FF:FF:FF 00:00:00:00:00:00 255.255.255.255 

192.168.0.1

The process of taking a large network and splitting it up into many individual and smaller subnetworks is known as \_\_\_\_\_\_\_\_.

encapsulation fragmentation subnetting routing

RFC stands for \_\_\_\_\_\_.

Routing Frequency Control Request For Comments Realtime Frame Check Redundant Frame Controller

A \_\_\_\_\_\_\_\_ is where one network ends and another begins.

subnet mask routing table demarcation point routing protocol

Using CIDR notation, the subnet mask 255.255.255.0 would be written as \_\_\_\_\_\_\_.

/64 /24 /8 /16

Why do entries in a local Address Resolution Protocol (ARP) table expire after a short amount of time? To keep space in the table. It only needs to be used one time. To account for network changes It will use too much memory.

A router is performing basic routing functions. What will be the third step in the transmission of a packet?

The router forwards the packet. A router receives a packet of data. The router examines the destination IP. The router looks up the destination network in its routing table.

How many bits long is an IP address?

8 bits 64 bits 32 bits 256 bits

When dealing with IPv4, what is the minimum IP header length?

8 bits 4 kilobytes 20 bytes 64 bytes

Which IP address is Class C?

132.26.144.52 192.37.48.98 224.24.45.69 128.42.39.72

What is the correct term for the list of IP addresses and the MAC addresses associated with them?

ARP table Directory service File transfer protocol (FTP) SQL database

What does the subnet mask 255.255.255.0 tell a router?

What the MAC address of a host is The static IP of the gateway router The next hop in the network route Which part of an IP address is the subnet ID and which is the host ID

What will the operator 1 AND 1 return?

0 -1 2 1

Computer A wants to send some data to computer B. Computer A knows that Computer B is not on its local network, so it sends the packet to the router between Network A and Network B. Based on how many network hops have happened, how much will the TTL field be decremented by?

8 1 2 6

Which are a type of interior gateway protocol? (Check all that apply)



TFTP (Trivial File Transfer Protocol)



Distance-vector protocols

Correct

Well done! A router using a distance vector protocol basically just takes its routing table, which is a list of every network known to it and how far away these networks are in terms of hops. Then the router sends this list to every neighboring router, which is basically every router directly connected to it.



Link state routing protocols

Correct

Well done! Link state protocols get their name because each router advertises the state of the links of each of its interfaces. This information about each router is propagated to every other router on an autonomous system.



RDP (Remote Desktop Protocol)