CCNA 1 Chapter 8 v5.0 Exam Answers 2013

1

Fill in the blank.

The decimal equivalent of the binary number 10010101 is   ”**149**” .

2

Match each IPv4 address to the appropriate address category. (Not all options are used.)	
192.168.100.161/25	**host address**
192.168.1.191/26	Target
10.10.10.128/25	Target
224.10.0.254/24	Target
203.0.113.100/24	**network address**
10.0.50.10/30	Target
172.110.12.64/28	Target
10.0.0.159/27	Target
192.168.1.80/29	**broadcast address**
	Target
	Target

Place the options in the following order:

[+] 192.168.100.161/25

[+] 203.0.113.100/24

[+] 10.0.50.10/30

[#] 192.168.1.80/29

[#] 172.110.12.64/28

[#] 10.10.10.128/25

[*] 10.0.0.159/27

[*] 192.168.1.191/26

[+] Order does not matter within this group.

[#] Order does not matter within this group.

[*] Order does not matter within this group.

3

What is indicated by a successful ping to the ::1 IPv6 address?

The link-local address is correctly configured.

The default gateway address is correctly configured.

The host is cabled properly.

All hosts on the local link are available.

IP is properly installed on the host.*

4

Launch PT - Hide and Save PT
Open the PT Activity. Perform the tasks in the activity instructions and then answer the question.

Which message is displayed on the web server?

Correct configuration!*

IPv6 address configured!

You did it right!

Successful configuration!

5
Which two ICMP messages are used by both IPv4 and IPv6 protocols? (Choose two.)

router solicitation

protocol unreachable*

neighbor solicitation

route redirection*

router advertisement

6
A message is sent to all hosts on a remote network. Which type of message is it?

unicast

directed broadcast*

limited broadcast

multicast

7
Which two things can be determined by using the ping command? (Choose two.)

the average time it takes each router in the path between source and destination to respond

the average time it takes a packet to reach the destination and for the response to return to the source*

whether or not the destination device is reachable through the network*

the IP address of the router nearest the destination device

the number of routers between the source and destination device

8
A DHCP server is used to assign IP addresses dynamically to the hosts on a network. The address pool is configured with 192.168.10.0/24. There are 3 printers on this network that need to use reserved static IP addresses from the pool. How many IP addresses in the pool are left to be assigned to other hosts?

253

252

251*

254

9
Which two parts are components of an IPv4 address? (Choose two.)

logical portion

network portion*

physical portion

broadcast portion

host portion*

subnet portion

10
Which IPv6 address is most compressed for the full FE80:0:0:0:2AA:FF:FE9A:4CA3 address?

FE80::2AA:FF:FE9A:4CA3*

FE80::0:2AA:FF:FE9A:4CA3

FE80:::0:2AA:FF:FE9A:4CA3

FE8::2AA:FF:FE9A:4CA3

11

Match each description with an appropriate IP address. (Not all options are used.)	
a private address	64.102.90.23
a loopback address	169.254.1.5
an experimental address	192.0.2.123
a TEST-NET address	240.2.6.255
a link-local address	172.19.20.5
	127.0.0.1

Match each description with an appropriate IP address. (Not all options are used.)	
	64.102.90.23
	a link-local address
	a TEST-NET address
	an experimental address
	a private address
	a loopback address

12
What are three parts of an IPv6 global unicast address? (Choose three.)

an interface ID that is used to identify the local host on the network*

an interface ID that is used to identify the local network for a particular host

a subnet ID that is used to identify networks inside of the local enterprise site*

a global routing prefix that is used to identify the network portion of the address that has been provided by an ISP*

a global routing prefix that is used to identify the portion of the network address provided by a local administrator

13

Match each description with an appropriate IP Address. (Not all options are used.)	

an invalid IPv4 address	192.31.18.123
a legacy class A address	198.256.2.6
a legacy class B address	64.100.3.5
a legacy class C address	224.2.6.255
a legacy class D address	242.56.6.1
	128.107.5.1

Match each description with an appropriate IP Address. (Not all options are used.)

	a legacy class C address
	an invalid IPv4 address
	a legacy class A address
	a legacy class D address
	242.56.6.1
	a legacy class B address

14

Which network migration technique encapsulates IPv6 packets inside IPv4 packets to carry them over IPv4 network infrastructures?

encapsulation

translation

dual-stack

tunneling*

15

When an IPv6 enabled host needs to discover the MAC address of an intended IPv6 destination, which destination address is used by the source host in the NS message?

global unicast address of the receiver

solicited-node multicast address*

all-node multicast address

link-local address of the receiver

16
When a Cisco router is being moved from an IPv4 network to a complete IPv6 environment, which series of commands would correctly enable IPv6 forwarding and interface addressing?

Router# configure terminal
Router(config)# interface fastethernet 0/0
Router(config-if)# ip address 192.168.1.254 255.255.255.0
Router(config-if)# no shutdown
Router(config-if)# exit
Router(config)# ipv6 unicast-routing

Router# configure terminal
Router(config)# interface fastethernet 0/0
Router(config-if)# ipv6 address 2001:db8:bced:1::9/64
Router(config-if)# no shutdown
Router(config-if)# exit
Router(config)# ipv6 unicast-routing **************

Router# configure terminal
Router(config)# interface fastethernet 0/0
Router(config-if)# ipv6 address 2001:db8:bced:1::9/64
Router(config-if)# no shutdown

Router# configure terminal
Router(config)# interface fastethernet 0/0
Router(config-if)# ip address 2001:db8:bced:1::9/64
Router(config-if)# ip address 192.168.1.254 255.255.255.0
Router(config-if)# no shutdown

17
What two statements describe characteristics of Layer 3 broadcasts? (Choose two.)

There is a broadcast domain on each switch interface.

Routers create broadcast domains.*

A router will not forward any type of Layer 3 broadcast packet.

Broadcasts are a threat and users must avoid using protocols that implement them.

A limited broadcast packet has a destination IP address of 255.255.255.255.*

Some IPv6 protocols use broadcasts.

18
Which two statements are correct about IPv4 and IPv6 addresses? (Choose two.)

IPv6 addresses are represented by hexadecimal numbers.*

IPv6 addresses are 32 bits in length.

IPv4 addresses are 128 bits in length.

IPv4 addresses are represented by hexadecimal numbers.

IPv4 addresses are 32 bits in length.*

IPv6 addresses are 64 bits in length.

19
What is the prefix length notation for the subnet mask 255.255.255.224?

/26

/28

/27*

/25

20
Fill in the blank.
What is the decimal equivalent of the hex number 0x3F?   "**63**"
21
What are two types of IPv6 unicast addresses? (Choose two.)

anycast

link-local*

multicast

loopback*

broadcast

22
When will a router drop a traceroute packet?

when the router receives an ICMP Time Exceeded message

when the host responds with an ICMP Echo Reply message

when the value in the TTL field reaches zero*

when the values of both the Echo Request and Echo Reply messages reach zero

when the RTT value reaches zero

23

An IPv6 enabled device sends a data packet with the destination address of FF02::1. What is the target of this packet?

all IPv6 configured routers across the network

all IPv6 configured routers on the local link

all IPv6 enabled nodes on the local link*

all IPv6 DHCP servers

24

How many bits are in an IPv4 address?

256

128

64

32*