CCNA ICND1 Hotspot - Show Configuration Sim

 The **show running-configuration** and the **show startup-configuration** commands have been disabled in this simulation. To access the multiple-choice questions, click on the numbered boxes on the right of the top panel. There are 5 multiple-choice questions with this task. Be sure to answer all 5 questions before leaving this item. This task requires the use of various show commands from the CLI of Router1 to answer 5 multiple-choice questions. This does not require any configuration.

Question 1: What is the subnet broadcast address of the LAN connected to Router1?   A - 192.168.136.15   B -192.168.136.31 C -192.168.136.63   D - 192.168.136.127   E - 255.255.255.255 Answer: A Explanation: The "show running-configuration" and "show startup-configuration" have been disabled as stated above so we should use the show ip interface command to get information about the LAN network connected to Router1.

```
Router1# show ip interface

FastEthernet0/0 is up, line protocol is up (connected)
  Internet address is  192.168.136.1/28
  Broadcast address is 255.255.255.255
  Address determined by setup command
  MTU is 1500 bytes
  Helper address is not set
  Directed broadcast forwarding is diabled
  Outgoing access list is not set
  Inbound access list is not set

.........................................
<output omitted>
```

From the output we learn that the ip address of the FastEthernet interface of Router1 is 192.168.136.1 and the subnet mask is /28. Therefore: Increment: 16 (/28=1111 1111.1111 1111.1111 1111.111**1** 0000)   Network address: 192.168.136.0   Broadcast address: 192.168.136.15 (15 = 0 + 16 - 1) -> The broadcast address of this subnetwork is 192.168.136.15 Question 2: What is the bandwidth on the WAN interface of Router1?   A - 16 Kbit/sec   B - 32 Kbit/sec   C - 64 Kbit/sec   D - 128 Kbit/sec   E - 512 Kbit/sec   F - 1544 Kbit/sec Answer: E Explanation: To find out the bandwidth on the WAN (serial) interface of Router1 we need to use the show interfaces serial 0/0 command:

```
Router1# show interface serial 0/0

Serial0/0 is administratively down, line protocol is down
  Hardware is PowerQUICC Serial
  Internet address is 10.11.12.13/30
  MTU 1500 bytes,  BW 512 Kbit , DLY 20000 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)
  Last input 00:00:05, output 00:00:05, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total out drops: 0
```

Therefore the bandwidth on the WAN is 512 Kbit/sec.   Question 3: What interfaces on Router1 have not had any configurations applied? (Choose two) A - Ethernet 0   B - FastEthenet 0/0   C - FastEthernet 0/1   D - Serial 0   E - Serial 0/0   F - Serial 0/1   Answer: C F Explanation: Use the show ip interface brief to identify what interfaces Router 1 have. Notice that Router1 does not have Ethernet 0 and Serial 0 interfaces. FastEthernet 0/0 and Serial 0/0 were configured with their IP addresses therefore only FastEthernet 0/1 and Serial0/1 have not had any configurations applied. Question 4: Including the address on the Router1 FastEthernet interface, how many hosts can have IP addresses on the LAN to which Router1 is connected?   A - 6   B - 14   C - 62   D - 128   Answer: B Explanation: The mask address of interface Fa0/0 of Router1 is /28 (as shown in question 1), which has four 0 bits (1111 1111.1111 1111.1111 1111.1111 **0000**). Therefore there are 24 - 2 = 14 assignable IP addresses for hosts on the LAN.   Question 5: The hosts in the LAN are not able to connect to the Internet. Which commands will correct this issue?   A - Router1(conf)# interface fa0/0   Router1(conf-if)# no shutdown   B - Routed (conf)# interface fa0/1   Router1(conf-if)# no shutdown   C - Router1(conf)# interface s0/0   Router1(conf-if)# no shutdown   D - Router1(conf)# interface s0/1   Router1(conf-if)# no shutdown   E - Router1(conf)# interface s0/0   Router1(conf-if)# ip address 10.11.12.13 255.255.255.252   F - Router1(conf)# interface s0/1   Routerl (conf-if)# ip address 10.11.12.13 255.255.255.252 Answer: C Explanation: We should check the statuses of all the interfaces on Router1 with the show ip interface brief command:

Router1# show interface brief		
Interface	IP-Address	OI
FastEthernet0/0	192.168.136.1	YE
FastEthernet0/1	unassigned	YI
Serial0/0	10.11.12.13	YI
Serial0/1	unassigned	Y
Serial1/0	unassigned	Y
Serial1/1	unassigned	Y

From the output, we learn that the status of Serial0/0 interface which connects to ISP router is currently "administratively down". This status indicates this interface is shutting down so we need to turn it on.