

Name _____ Date _____

Module 10 – Basic Router Configuration

Introduction to Networks – Semester 1

Student Version

Module 10 Sections:

- 10.0 Introduction
- 10.1 Configure Initial Router Settings
- 10.2 Configure Interfaces
- 10.3 Configure the Default Gateway
- 10.4 Module Practice and Quiz

Required Materials:

Reading Organizer

Packet Tracer Activities: 10.1.4 - Configure Initial Router Settings
 10.3.4 - Connect a Router to a LAN
 10.3.5 - Troubleshoot Default Gateway Issues
 10.4.3 - Basic Device Configuration

Labs: 10.4.4 - Build a Switch and Router Network

Module's 8 – 10 Exam

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Module 10 – Basic Router Configuration

Introduction to Networks – Semester 1

Teacher Version

Note: The Reading Organizer has weighted scoring. Any question with the word **explain, define, or describe** in it is expected to have a longer answer and is worth two points each.

After completion of this chapter, you should be able to:

- Configure initial settings on an IOS Cisco router.
- Configure two active interfaces on a Cisco IOS router.
- Configure devices to use the default gateway.

10.1 Configure Initial Router Settings

1. What will the prompt look like after typing in the router hostname command?

```
Router> enable
Router# configure terminal
Enter configuration commands, one per line.
End with CNTL/Z.
Router(config)# hostname R1
```

Answer: _____

2. What is the most important mode to secure? Explain why.

3. What is the purpose of the legal notification or banner motd commands?

4. Explain why is it important to save the configuration when changes are implemented?

10.2 Configure Interfaces

5. There are several commands that can be used to verify interface configuration. List two of the most useful.

a.

b.

6. List and describe the more popular show commands used to verify interface configuration.

a. _____ & _____ -

b. _____ & _____ -

c. _____ -

d. _____ -

e. _____ -

10.3 Configure the Default Gateway

7. If your local network has only one router, what responsibility will it have and who will be connecting to it?

8. Explain when a default gateway is used by a host?

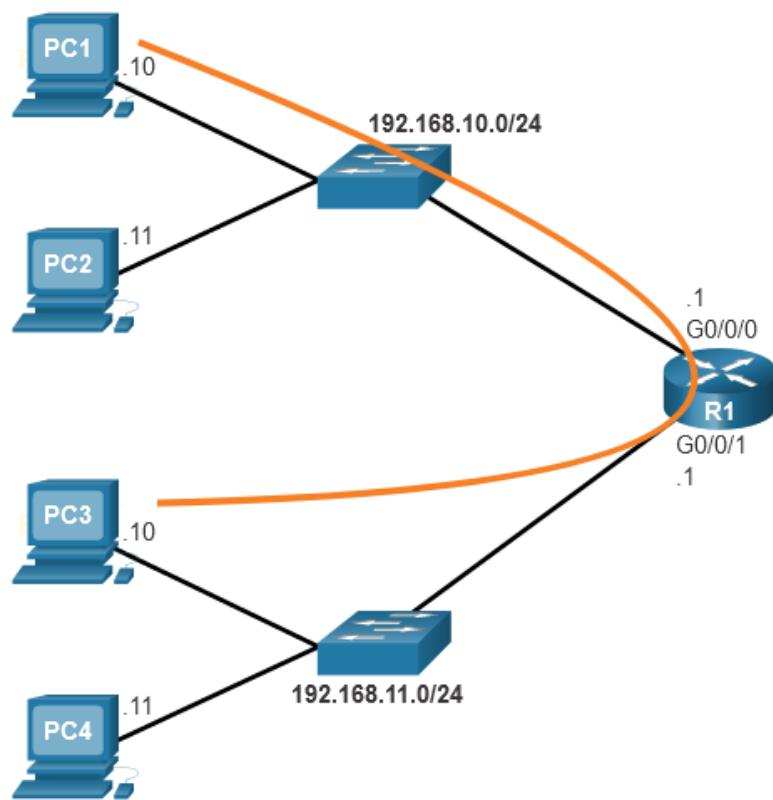
9. What is the default gateway address?

10. The IP address of the _____ device and the router interface _____ must be in the same network.

11. Based on the graphic, what is PC1's default gateway port and IP address? What is PC3's default gateway port and IP address?

PC1
Port - _____
IP Address - _____

PC3
Port - _____
IP Address - _____



12. A switch that interconnects client computers is typically a Layer 2 device, and does not require an IP address to function properly. Explain why you should give it one anyway?

13. To connect to and manage a switch over a local IP network, it must have a _____ configured.

14. Along with an IPv4 address and subnet mask on the local LAN, what other address does a switch need? Explain why.

15. The _____ address is typically configured on all devices that will communicate beyond their local network.

16. If you assign a default gateway to a switch, do the hosts attached to that switch still need a default gateway assigned to them?

17. A workgroup switch configured with an IPv6 address on an SVI does not require the IPv6 address of the default gateway to be configured manually. Explain why.