

# CCNA 1 v5.1 Chapter 6 PT Practice Skills Assessment – Packet Tracer

 [ccnav6.com/ccna-1-v5-1-chapter-6-pt-practice-skills-assessment-packet-tracer.html](http://ccnav6.com/ccna-1-v5-1-chapter-6-pt-practice-skills-assessment-packet-tracer.html)

CCNA Exam Answers 2017

CCNA 1 v5.1 Chapter 6 PT Practice Skills Assessment – Packet Tracer

5 (3) votes

## CCNA Routing and Switching

### Introduction to Networks

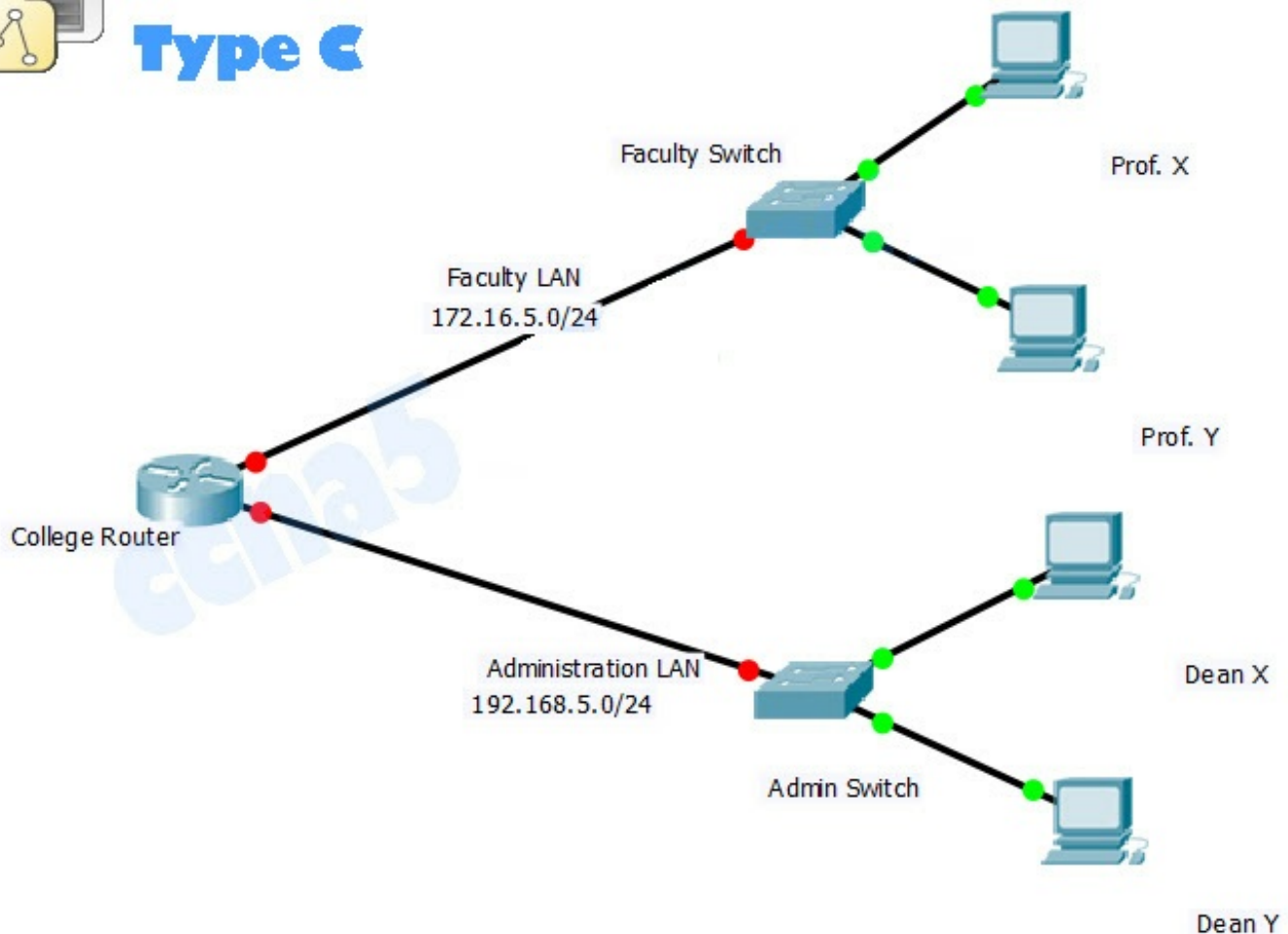
#### Chapter 6 Skills Assessment – Packet Tracer

- TYPE C
- TYPE A
- TYPE B

#### Topology



**Type C**



You will receive one of three possible topologies

## Addressing Table

Device	Interface	Address	Subnet Mask	Default Gateway
College	G0/0	172.16.5.1	255.255.255.0	N/A
	G0/1	192.168.5.1	255.255.255.0	N/A
Faculty	VLAN 1	172.16.5.2	255.255.255.0	<b>172.16.5.1</b>
Admin	VLAN 1	192.168.5.252	255.255.255.0	<b>192.168.5.1</b>
Prof X	NIC	172.16.5.10	255.255.255.0	<b>172.16.5.1</b>
Prof Y	NIC	172.16.5.11	255.255.255.0	<b>172.16.5.1</b>
Dean X	NIC	192.168.5.10	255.255.255.0	<b>192.168.5.1</b>
Dean Y	NIC	192.168.5.11	255.255.255.0	<b>192.168.5.1</b>

## Objectives

- Perform basic device configuration tasks on a router and a switch
- Configure IP addressing settings on network devices
- Verify Layer 3 connectivity and troubleshoot connectivity issues

## Scenario

You are working on a network that has already been partially configured. In this assessment you will complete a set of requirements by configuring some additional settings on the Faculty switch and the router. Use the knowledge that you have gained in the curriculum and labs to fulfill the requirements below.

**Note: If you need a value that is not given to you, you can use any value you want. However, you must use the correct values for the default gateways in order that the hosts can communicate.**

## Requirements

- Determine the values that are missing from the Addressing Table
- Configure all devices with the missing default gateway values
- Name the Faculty switch **Faculty**. Your configuration must match this value exactly.
- Secure access to all configuration lines of the Faculty switch
- Secure access to the device configurations of the Faculty switch using the encrypted password
- Ensure that all plain text passwords on the Faculty switch are encrypted
- Configure an appropriate banner on the Faculty switch
- Configure addressing for all devices according to the Addressing Table. Most values are provided in the table, others you must determine.
- Document interfaces with descriptions on the College router interfaces and the Faculty switch virtual interface
- Save your configurations
- Verify connectivity between all devices. All devices should be able to ping all of the other devices.
- Troubleshoot any connectivity problems.

**All devices should be able to ping one another when you have successfully completed the activity.**

## College Router Configuration

```
Router>enable
Router#configure terminal
Router(config)#hostname College
College(config)#enable secret cisco
College(config)#line console 0
College(config-line)#password cisco
College(config-line)#login
College(config-line)#exit
College(config)#line vty 0 4
College(config-line)#password cisco
College(config-line)#login
College(config-line)#exit
College(config)#line aux 0
College(config-line)#password cisco
College(config-line)#login
College(config-line)#exit
College(config)#service password-encryption
College(config)#banner motd $Authorized Personnel
Only$
College(config)#interface g0/0
College(config-if)#ip address 172.16.5.1 255.255.255.0
College(config-if)#no shutdown
College(config-if)#description Faculty LAN
College(config-if)#exit
College(config)#interface g0/1
College(config-if)#ip address 192.168.5.1
255.255.255.0
College(config-if)#no shutdown
College(config-if)#description Admin LAN
College(config-if)#end
College#write
Building configuration...
[OK]
```

## Faculty Switch Configuration

```
Switch>enable
Switch#configure terminal
Switch(config)#hostname Faculty
Faculty(config)#enable secret class
Faculty(config)#line console 0
Faculty(config-line)#password cisco
Faculty(config-line)#login
Faculty(config-line)#exit
Faculty(config)#line vty 0 4
Faculty(config-line)#password cisco
Faculty(config-line)#login
Faculty(config-line)#exit
Faculty(config)#service password-encryption
Faculty(config)#banner motd $Authorized Personnel
Only$
Faculty(config)#interface vlan 1
Faculty(config-if)#ip address 172.16.5.2 255.255.255.0
Faculty(config-if)#no shutdown
Faculty(config-if)#description Faculty - College LAN
Faculty(config-if)#exit
Faculty(config)#ip default-gateway 172.16.5.1
Faculty(config)#end
Faculty#write
Building configuration...
[OK]
```

## Admin Switch Configuration

```
Switch>enable
Switch#configure terminal
Switch(config)#hostname Admin
Admin(config)#enable secret class
Admin(config)#line console 0
Admin(config-line)#password cisco
Admin(config-line)#login
Admin(config-line)#exit
Admin(config)#line vty 0 4
Admin(config-line)#password cisco
Admin(config-line)#login
Admin(config-line)#exit
Admin(config)#service password-encryption
Admin(config)#banner motd $Authorized Personnel Only$
Admin(config)#interface vlan 1
Admin(config-if)#ip address 192.168.5.252
255.255.255.0
Admin(config-if)#no shutdown
Admin(config-if)#description Admin - College LAN
Admin(config-if)#exit
Admin(config)#ip default-gateway 192.168.5.1
Admin(config)#end
Admin#write
Building configuration...
[OK]
```

## Prof X

*IP Address: 172.16.5.10*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **172.16.5.1***

## Prof Y

*IP Address: 172.16.5.11*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **172.16.5.1***

## Dean X

*IP Address: 192.168.5.10*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **192.168.5.1***

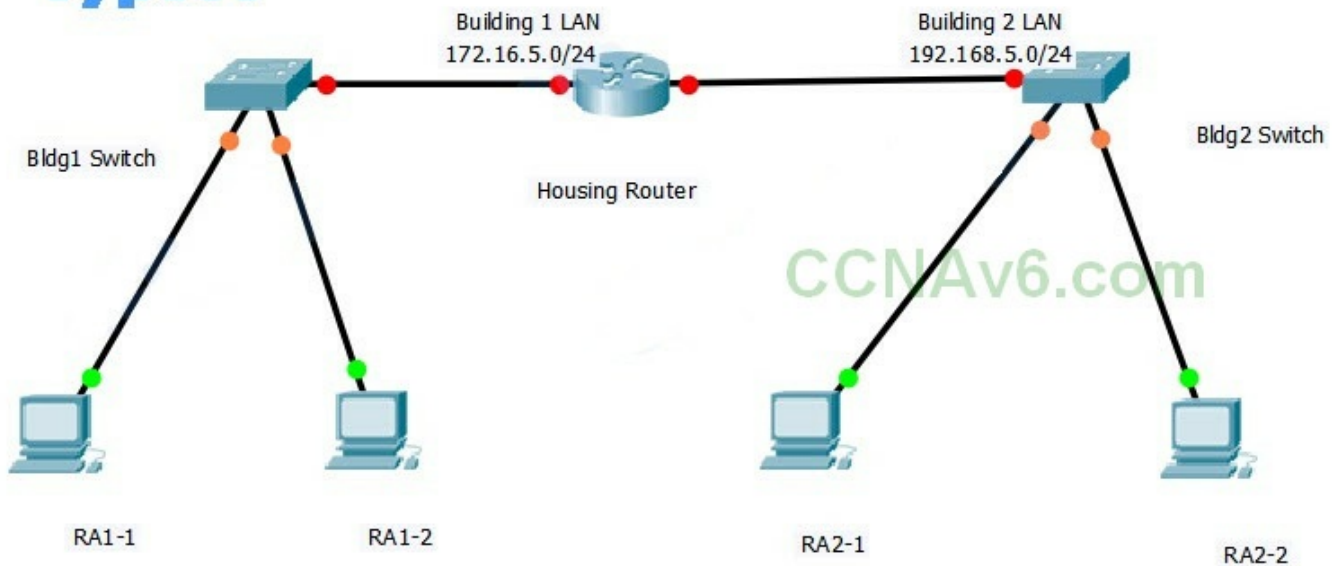
## Dean Y

*IP Address: 192.168.5.11*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **192.168.5.1***

## Topology



## Type A



You will receive one of three possible topologies

### Addressing Table

Device	Interface	Address	Subnet Mask	Default Gateway
Housing	G0/0	172.16.5.1	255.255.255.0	N/A
	G0/1	192.168.5.1	255.255.255.0	N/A
Bldg1	VLAN 1	172.16.5.2	255.255.255.0	<b>172.16.5.1</b>
Bldg2	VLAN 1	192.168.5.252	255.255.255.0	<b>192.168.5.1</b>
RA1-1	NIC	172.16.5.10	255.255.255.0	<b>172.16.5.1</b>
RA1-2	NIC	172.16.5.11	255.255.255.0	<b>172.16.5.1</b>
RA2-1	NIC	192.168.5.10	255.255.255.0	<b>192.168.5.1</b>
RA2-2	NIC	192.168.5.11	255.255.255.0	<b>192.168.5.1</b>

### Housing Router Configuration

```
Router>enable
Router#configure terminal
Router(config)#hostname Housing
Housing(config)#enable secret cisco
Housing(config)#line console 0
Housing(config-line)#password cisco
Housing(config-line)#login
Housing(config-line)#exit
Housing(config)#line vty 0 4
Housing(config-line)#password cisco
Housing(config-line)#login
Housing(config-line)#exit
Housing(config)#line aux 0
Housing(config-line)#password cisco
Housing(config-line)#login
Housing(config-line)#exit
Housing(config)#service password-encryption
Housing(config)#banner motd $Authorized Personnel
Only$
Housing(config)#interface g0/0
Housing(config-if)#ip address 172.16.5.1 255.255.255.0
Housing(config-if)#no shutdown
Housing(config-if)#description Bldg1 LAN
Housing(config-if)#exit
Housing(config)#interface g0/1
Housing(config-if)#ip address 192.168.5.1
255.255.255.0
Housing(config-if)#no shutdown
Housing(config-if)#description Bldg2 LAN
Housing(config-if)#end
Housing#write
Building configuration...
[OK]
```

## Bldg1 Switch Configuration

```
Switch>enable
Switch#configure terminal
Switch(config)#hostname Bldg1
Bldg1(config)#enable secret class
Bldg1(config)#line console 0
Bldg1(config-line)#password cisco
Bldg1(config-line)#login
Bldg1(config-line)#exit
Bldg1(config)#line vty 0 4
Bldg1(config-line)#password cisco
Bldg1(config-line)#login
Bldg1(config-line)#exit
Bldg1(config)#service password-encryption
Bldg1(config)#banner motd $Authorized Personnel
Only$
Bldg1(config)#interface vlan 1
Bldg1(config-if)#ip address 172.16.5.2 255.255.255.0
Bldg1(config-if)#no shutdown
Bldg1(config-if)#description Bldg1 - Housing LAN
Bldg1(config-if)#exit
Bldg1(config)#ip default-gateway 172.16.5.1
Bldg1(config)#end
Bldg1#write
Building configuration...
[OK]
```

## Bldg2 Switch Configuration

```
Switch>enable
Switch#configure terminal
Switch(config)#hostname Bldg2
Bldg2(config)#enable secret class
Bldg2(config)#line console 0
Bldg2(config-line)#password cisco
Bldg2(config-line)#login
Bldg2(config-line)#exit
Bldg2(config)#line vty 0 4
Bldg2(config-line)#password cisco
Bldg2(config-line)#login
Bldg2(config-line)#exit
Bldg2(config)#service password-encryption
Bldg2(config)#banner motd $Authorized Personnel Only$
Bldg2(config)#interface vlan 1
Bldg2(config-if)#ip address 192.168.5.252
255.255.255.0
Bldg2(config-if)#no shutdown
Bldg2(config-if)#description Bldg2 - Housing LAN
Bldg2(config-if)#exit
Bldg2(config)#ip default-gateway 192.168.5.1
Bldg2(config)#end
Bldg2#write
Building configuration...
[OK]
```



## RA1-1

*IP Address: 172.16.5.10*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **172.16.5.1***

## RA1-2

*IP Address: 172.16.5.11*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **172.16.5.1***

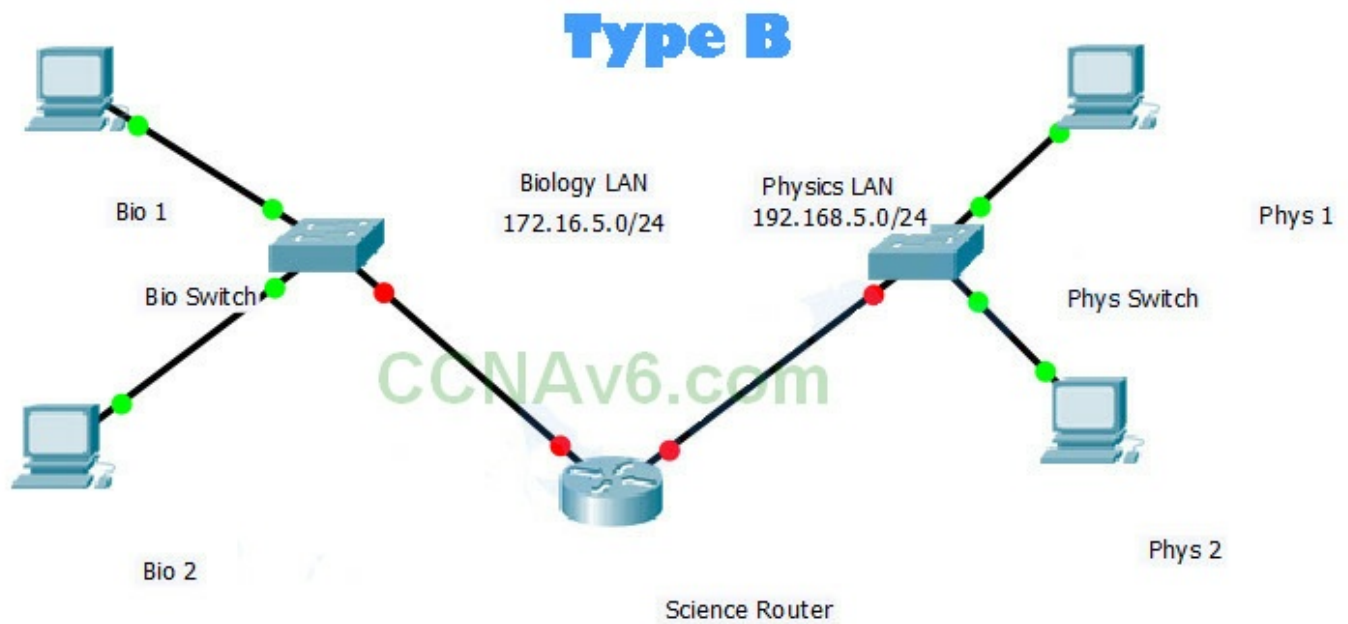
## RA2-1

*IP Address: 192.168.5.10*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **192.168.5.1***

## RA2-2

*IP Address: 192.168.5.11*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **192.168.5.1***

## Topology



You will receive one of three possible topologies

### Addressing Table

Device	Interface	Address	Subnet Mask	Default Gateway
Science	G0/0	172.16.5.1	255.255.255.0	N/A
	G0/1	192.168.5.1	255.255.255.0	N/A
Bio	VLAN 1	172.16.5.2	255.255.255.0	<b>172.16.5.1</b>
Phys	VLAN 1	192.168.5.252	255.255.255.0	<b>192.168.5.1</b>
Bio 1	NIC	172.16.5.10	255.255.255.0	<b>172.16.5.1</b>
Bio 2	NIC	172.16.5.11	255.255.255.0	<b>172.16.5.1</b>
Phys 1	NIC	192.168.5.10	255.255.255.0	<b>192.168.5.1</b>
Phys 2	NIC	192.168.5.11	255.255.255.0	<b>192.168.5.1</b>

### Science Router Configuration

```
Router>enable
Router#configure terminal
Router(config)#hostname Science
Science(config)#enable secret cisco
Science(config)#line console 0
Science(config-line)#password cisco
Science(config-line)#login
Science(config-line)#exit
Science(config)#line vty 0 4
Science(config-line)#password cisco
Science(config-line)#login
Science(config-line)#exit
Science(config)#line aux 0
Science(config-line)#password cisco
Science(config-line)#login
Science(config-line)#exit
Science(config)#service password-encryption
Science(config)#banner motd $Authorized Personnel
Only$
Science(config)#interface g0/0
Science(config-if)#ip address 172.16.5.1 255.255.255.0
Science(config-if)#no shutdown
Science(config-if)#description Bio LAN
Science(config-if)#exit
Science(config)#interface g0/1
Science(config-if)#ip address 192.168.5.1
255.255.255.0
Science(config-if)#no shutdown
Science(config-if)#description Phys LAN
Science(config-if)#end
Science#write
Building configuration...
[OK]
```

## Bio Switch Configuration

```
Switch>enable
Switch#configure terminal
Switch(config)#hostname Bio
Bio(config)#enable secret class
Bio(config)#line console 0
Bio(config-line)#password cisco
Bio(config-line)#login
Bio(config-line)#exit
Bio(config)#line vty 0 4
Bio(config-line)#password cisco
Bio(config-line)#login
Bio(config-line)#exit
Bio(config)#service password-encryption
Bio(config)#banner motd $Authorized Personnel
Only$
Bio(config)#interface vlan 1
Bio(config-if)#ip address 172.16.5.2 255.255.255.0
Bio(config-if)#no shutdown
Bio(config-if)#description Bio - Science LAN
Bio(config-if)#exit
Bio(config)#ip default-gateway 172.16.5.1
Bio(config)#end
Bio#write
Building configuration...
[OK]
```

## Phys Switch Configuration

```
Switch>enable
Switch#configure terminal
Switch(config)#hostname Phys
Phys(config)#enable secret class
Phys(config)#line console 0
Phys(config-line)#password cisco
Phys(config-line)#login
Phys(config-line)#exit
Phys(config)#line vty 0 4
Phys(config-line)#password cisco
Phys(config-line)#login
Phys(config-line)#exit
Phys(config)#service password-encryption
Phys(config)#banner motd $Authorized Personnel Only$
Phys(config)#interface vlan 1
Phys(config-if)#ip address 192.168.5.252
255.255.255.0
Phys(config-if)#no shutdown
Phys(config-if)#description Phys - Science LAN
Phys(config-if)#exit
Phys(config)#ip default-gateway 192.168.5.1
Phys(config)#end
Phys#write
Building configuration...
[OK]
```

## Bio 1

*IP Address: 172.16.5.10*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **172.16.5.1***

## Bio 2

*IP Address: 172.16.5.11*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **172.16.5.1***

## Phys 1

*IP Address: 192.168.5.10*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **192.168.5.1***

## Phys 2

*IP Address: 192.168.5.11*  
*Subnet Mask: 255.255.255.0*  
*Default Gateway: **192.168.5.1***

[Prev Article](#)

[Next Article](#)