# 430/530 – Networking Commands Lab

Name: _____

Answer the following questions using complete sentences. You may use outside sources to help you formulate responses; however, all answers should be in your own words, and sources should be cited.

## Host & Domain Names Activity

Screen Capture: hostname terminal output (with all three commands and netid showing)

1. What is the full name of the host?

2. What is the hostname portion of the full name of the host?

3. What is the domain name portion of the full name of the host?

## Interface Configurations Activity

Screen Capture: ifconfig terminal output (with command and netid showing)

1. What is the IP address for the test laboratory machine?

2. What is the netmask for the test laboratory?

# Network Statistics Activity

Screen Capture: `netstat -r -n` terminal output (with command and netid showing)

1. Use the output from the screen capture to determine the address of the gateway that will be used if you were to send a packet to www.YouTube.com.

2. Snippet Info:

```
$ netstat -n
Active Internet connections
Proto Recv-Q Send-Q Local Address          Foreign Address        (state)
tcp4       0      0 10.90.46.27.12600      10.90.46.252.113       SYN_SENT
tcp4       0      0 10.90.46.27.25         10.90.46.252.48570     CLOSE_WAIT
tcp4       0      0 10.90.46.27.12599      10.90.46.253.113       SYN_SENT
tcp4       0      0 10.90.46.27.25         10.90.46.253.39680     CLOSE_WAIT
tcp4       0     36 10.90.46.27.22         10.64.30.181.65226     ESTABLISHED
```

Source IP Address:

Source Port Number:

Source Port Number Type:

If the port number is a well-known port, enter the protocol information associated with the port number; otherwise, enter N/A.

Destination IP Address:

Destination Port Number:

Destination Port Number Type:

If the port number is a well-known port, enter the protocol information associated with the port number; otherwise, enter N/A.

# ARP Table Activity

Screen Capture: arp -a terminal output (with command and netid showing)

1. Using the output captured on the screenshot, determine the Ethernet address of the gateway identified in the Network Statistics section.

2. Using the man pages in the terminal, what does the *single* flag -a in arp -a do?

# Reflection

In a paragraph, reflect on what you have accomplished in this lab. Please do not repeat what has been written in the instructions, but rather document your experience and reactions.