

choose one:     Received       Received help from:  
 (or more)      no help       Collaborated with: \_\_\_\_\_

**Homework:    /SI110/The Cyber Battlefield/Networks and Protocols 3 & 4**

1. You need to know that port 80 is for HTTP traffic, 22 is for SSH, and 53 is for DNS. Otherwise you do not need to memorize the ports associated with different services. What you do need to memorize, however, is what protocols go with what services go with what tools from the table in your notes. So fill in the rest of this table:

Protocol	Service	Tool	
<b>HTTP</b>			5/3/3/0
	<b>Secure remote shell</b>		5/3/3/0
		<b>WinSCP</b>	5/3/3/0
	<b>Get an IP Address on the fly</b>	<b>Client built-in to Windows</b>	5/3/3/0
<b>SMB</b>			5/3/3/0
	<b>Secure web traffic</b>		5/3/3/0
		rdesktop (Unix client)	5/3/3/0
	<b>Domain Name Resolution</b>		5/3/3/0

2. What is your IP Address when you are in your room in Bancroft Hall? You didn't set your laptop's IP address, so how did it get one? 5/4/3/0

3. Suppose ITSD had a program that examined every packet that went in or out of the Academy, that the program looked in every packet for the words *hack*, *hacking*, etc. and, if such a packet is found, the Mid that was sending or receiving the packet would be fried. Explain why you be in danger of being fried if you visited a website about hacking at the URL <http://innocuous.org>, but not at <https://innocuous.org>. 10/8/6/0

4. Suppose you have the following `netstat -an` output:

Proto	Local Address	Foreign Address	State
TCP	0.0.0.0:20	0.0.0.0:0	LISTENING
TCP	0.0.0.0:443	0.0.0.0:0	LISTENING
TCP	10.53.33.223:139	0.0.0.0:0	LISTENING
TCP	10.53.33.223:49227	10.53.53.15:22	ESTABLISHED
TCP	10.53.33.223:49230	10.53.53.15:80	ESTABLISHED
UDP	0.0.0.0:53	0.0.0.0:0	LISTENING

- a. This host is running an SSH server: T / F 5/0/0/0
- b. This host is running an SSH client: T / F 5/0/0/0
- c. This host is running a DNS server: T / F 5/0/0/0
- d. This host is running a DNS client: T / F 5/0/0/0
- e. This host is running an HTTP server: T / F 5/0/0/0
- f. This host is running an HTTP client: T / F 5/0/0/0
- g. This host is running an HTTPS server: T / F 5/0/0/0
- h. This host is running an HTTPS client: T / F 5/0/0/0

5. Suppose you gave a `netstat -an` command on your own laptop, and saw that you were listening on TCP port 22. Why would this not make any sense? Hint: it would similarly not make any sense to find that rona was listening on port 3389.

5/4/3/0