

10

ANSWERS TO EVEN-NUMBERED EXERCISES

2. Assuming `rwho` is disabled on the systems on your LAN, describe two ways to find out who is logged in on some of the other machines attached to your network.

Use `rsh`, `ssh`, or `telnet` to connect to and run `w` or `who` on each host.

Use `finger`.

Log in on the console of each host and run `w` or `who`.

4. A software implementation of chess was developed by GNU and is free software. How can you use the Internet to find a copy and download it?

Use a search engine to find **GNU chess** and download the software from an appropriate site. Or you can go to GNU home page and find the page that you can download the software from.

6. If you have access to the World Wide Web, answer the following:

- a. Which browser do you use?

System/user dependent, most likely Safari.

- b. What is the URL of the author of this book's home page? How many links does it have?

The URL is `www.sobell.com`, and the number of links varies.

- c. Does your browser allow you to create bookmarks? If so, how do you create a bookmark? How can you delete one?

Browser dependent.

8. Suppose the link between routers 1 and 2 is down in the Internet shown in Figure 0-1 on page 8. What happens if someone at site C sends a message

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to a user on a workstation attached to the Ethernet cable at site A? What happens if the router at site A is down? What does this tell you about designing network configurations?

Instead of traffic going from site C to router 1 to router 2 and then to site A, traffic goes from site C to router 1 to router 3 to router 2 and then to site A.

Network configurations are flexible and adaptive if redundancy has been designed in from the start.

10. Suppose you have 300 hosts and want to have no more than about 50 hosts per subnet. What size address block should you request from your ISP? How many class C–equivalent addresses would you need? How many subnets would you have left over from your allocation?

The next largest subnet above 50 that is a power of 2 is 64 addresses. $300/50$ is 6, so 6 subnets of 64 would be about 2 class C–equivalent networks. The subnet mask is 255.255.255.192 or /26. There would be two subnets left over.