ANSWERS TO EVEN-NUMBERED EXERCISES

2. How can you use ssh to find out who is logged in on a remote system named **tiger**?

Assuming you have the same username on both systems, the following command might prompt you for your password on the remote system; it displays the output of who run on **tiger**:

\$ ssh tiger who

4. How would you use ssh to run xterm on **plum** and show the display on the local system? Your username on **plum** is **max**.

Assuming that an X11 server running locally, the following command runs xterm on **plum**, logging in as **max**, and presents the display on the local system:

\$ ssh -Y plum xterm

You need the **-Y** option only if trusted X11 forwarding is not enabled.

6. When you try to connect to a remote system using an OpenSSH client and OpenSSH displays a message warning you that the remote host identification has changed, what has happened? What should you do?

This message indicates that the public key of the remote system is not the same as the local system recorded it. Check with the remote system's administrator to find out whether something changed. If everything is in order, remove the remote system's key from the file specified in the error message and try logging in on the remote system again using ssh. You can use ssh-keygen with the $-\mathbf{R}$ option followed by the name of the remote system to remove both hashed and non-hashed entries. When you log in again, the system will display the first-time authentication message (page 775) again as OpenSSH verifies that you are connecting to the correct system.

8. Which single command could you give to log in as **max** on the remote system named **plum** and open a **root** shell (on **plum**)? Assume **plum** has the **root** account locked and remote **root** logins disabled.

The following command logs in as **max** on **plum** and opens a **root** shell:

```
$ ssh -t max@plum sudo -i
```

When you run this command, you must supply Max's password twice (assuming you are running the command as a user without **root** privileges and you have not set up an automatic login for ssh). The sudo utility requires that its input come from standard input; the **-t** option allocates a pseudo-tty (terminal) to run sudo. The **-i** option (page 637) causes sudo to run a login shell on **plum**.

10. How would you use rsync with OpenSSH authentication to copy the memos12 file from the working directory on the local system to your home directory on plum? How would you copy the memos directory from the working directory on the local system to your home directory on plum and cause rsync to display each file as it copied the file?

```
$ rsync memos12 plum:
$ rsync -av memos plum:
```