## 19

## Answers to Even-numbered Exercises

2. Write an rsync command that copies the **backmeup** directory from your home directory on the local system to the /**tmp** directory on **guava**, preserving file ownership, permissions, and modification times. Write a command that will copy the same directory to your home directory on **guava**. Do not assume the working directory on the local system is your home directory.

```
$ rsync --archive ~/backmeup guava:/tmp
$ rsync --archive ~/backmeup guava:
```

In place of the **--archive** option you can use the **--owner**, **--perms**, **--recursive**, and **--times** options.

4. What does the --archive option do? Why is it useful?

The **--archive** option copies files including dereferenced symbolic links, device files, and special files recursively, preserving ownership, group, permissions, and modification times associated with the files. Using this option is the same as specifying the **--devices**, **--specials**, **--group**, **--links**, **--owner**, **--perms**, **--recursive**, and **--times** options.

Because it combines many frequently used options, the **--archive** option can make complex rsync commands easier to understand and maintain. It also means you do not have to remember to include all the necessary options with a given rsync command.

6. What effect does a trailing slash (/) on the *source-file* have?

A trailing slash on the *source-file* causes rsync to act as though you had specified a trailing /\* and causes rsync to copy the contents of the specified directory. Without the trailing slash, rsync copies the specified directory itself.