

Chapter 22

Functions That Actually Funct

In This Chapter

- ▶ Sending a value to a function
- ▶ Sending multiple values to a function
- ▶ Using the `return` keyword
- ▶ Understanding the `main()` function
- ▶ Writing tighter code

A function is like a machine. Although the do-nothing void functions that you probably have read about in earlier chapters are still valid functions, the real value in a function is having it do something. I mean, functions must chew on something and spit it out. Real meat-grinder stuff. Functions that funct.

This chapter explains how functions can be used to manipulate or produce information. It's done by sending a value to a function or by having a function return a value. This chapter explains how all that kooky stuff works.

Marching a Value Off to a Function

Generally speaking, you can write four types of functions:

- ✔ **Functions that work all by themselves, not requiring any extra input:** These functions are described in previous chapters. Each one is a ho-hum function, but often necessary and every bit a function as a function can be.
- ✔ **Functions that take input and use it somehow:** These functions are passed values, as either constants or variables, which they chew on and then do something useful based on the value received.
- ✔ **Functions that take input and produce output:** These functions receive something and give you something back in kind (known as *generating a value*). For example, a function that computed your weight based on your shoe size would swallow your shoe size and cough up your weight. So to speak. Input and output.