CHAPTER 10

VOID FUNCTIONS

The answers for the Void Functions section are located at the end of the section.

1. Write the code for the `displaySquareRoot` function. The function should display the square root of the `double` number passed to it. Use `number` as the parameter name. Then write the code to call the function, passing it the value stored in the `double num` variable.

2. Write the code for the `resetTotals` function. The function should assign the number 0.0 to the following four `double` variables: `totalNorthSales`, `totalSouthSales`, `totalEastSales`, and `totalWestSales`. Then write the code to call the function.

3. Write the code for the `displayMessage` function. The function should display a message containing the two values passed to it: a name and a sales amount. The message should say "Congratulations, *name*! You sold $*sales amount*." Use `salesName` and `sales` as the parameter names. Then write the code to call the function, passing it the contents of a `string` variable named `salesPerson` and a `double` variable named `salesAmt`.

4. Write the code for the `tripleNumber` function. The function receives two `int` variables: the first *by value* and the second *by reference*. The function should multiply the contents of the first `int` variable by 3 and then store the result in the second `int` variable. Use the following parameter names: `firstInt` and `secondInt`.

5. Write the code for a function named `calcSalesTax`. The function receives three `double` variables: the first two *by value* and the last one *by reference*. Use the following names for the parameters: `sales`, `taxRate`, and `salesTax`. The function should calculate the sales tax.

6. Write the code for a function named `displayNetIncome`. The function receives two `double` variables *by value*. Use the following names for the parameters: `revenue` and `expenses`. The function should calculate and display the net income.

ANSWERS FOR THE VOID FUNCTIONS SECTION

1.
```
void displaySquareRoot(double number)
{
     cout << sqrt(number) << endl;
}  //end of displaySquareRoot function
displaySquareRoot(num);
```

2.
```
void resetTotals()
{
     totalNorthSales = 0.0;
     totalSouthSales = 0.0;
     totalEastSales = 0.0;
     totalWestSales = 0.0;
}  //end of resetTotals function
resetTotals();
```

3.
```
void displayMessage(string salesName, double sales)
{
     cout << "Congratulations, " << salesName <<
          "! You sold $" << sales << endl;
}  //end of displayMessage function
displayMessage(salesPerson, salesAmount);
```

4.
```
void tripleNumber(int firstInt, int &secondInt)
{
    secondInt = firstInt * 3;
}  //end of tripleNumber function
```

5.
```
void calcSalesTax(double sales, double taxRate, double &salesTax)
{
     salesTax = sales * taxRate;
}  //end of calcSalesTax
```

6.
```
void displayNetIncome(double revenue, double expenses)
{
     cout << "Net income: " << revenue - expenses << endl;
}  //end of displayNetIncome function
```