Special Topic 7.1

Methods with a Variable Number of Parameters

Starting with Java version 5.0, it is possible to declare methods that receive a variable number of parameters. For example, we can modify the add method of the DataSet class of Chapter 6 so that one can add any number of values:

```
data.add(1, 3, 7);
data.add(4);
data.add(); // OK but not useful
```

The modified add method must be declared as

```
public void add(double... values)
```

The ... symbol indicates that the method can receive any number of double values. The xs parameter is actually a double[] array that contains all values that were passed to the method. The method implementation traverses the parameter array and processes the values:

```
public class DataSet
{
   . . .
   public void add(double... values)
   {
      for (int i = 0; i < values.length; i++) // values is a double[]
      {
         double x = values[i];
         sum = sum + x;
         if (count == 0 || maximum < x) maximum = x;
         count++;
      }
   }
}
```