Procedure specifications

/** Javadoc comment */
<method header> {
    ...
}

/** Set the title to t. */
public void setTitle(String t) {
    ...
}

1. The spec explains what each parameter is for (so, it must mention all of them).

2. The spec is a command to do something.

setTitle("I want peace");
Set the title to “I want peace”;}
/** Return true if a, b, and c are in ascending order. */

public static boolean areAscending(int a, int b, int c) {
    return a < b && b < c;
}

A function call produces a value.

The function spec should say what the function-call value equals.
Constructor specifications

/** Constructor: a new instance with chapter number n, chapter title t, and previous chapter null */

public Chapter(int n, String t)
{
...
}
Good specifications

• Written before the method body
• Accurate and complete
• Include preconditions — constraints on the parameters that must be satisfied in a call, constraints that the caller must be aware of.

/** = the square root of r.
   Precondition: r >= 0. */
public double sqrt(double r)
{
  ... 
}
Changing the spec

1. Change the specification to say what the method will now do.
2. Change the body to keep the specification accurate.

```java
/** = “a, b, and c are in non-descending order” : a <= b <= c */
public boolean areAscending(
    int a, int b, int c) {
    return a <= b && b <= c;
}
```