Inheritance and Interfaces
Self-review Questions

22.1 What is the output from running Inheritance1? Why is this the output?

22.2 What is the output from running Inheritance2? Why is this the output?

22.3 What is the output from running Override1? Why is this the output?

22.4 What is the output from running Final1? Why is this the output?

22.5 Referring to the MethodCallExample4 example on page 742, what happens with the following calls:

```java
s.f ( 1.0 , 1.0 ) ;
s.f ( 1.0f , 1 ) ;
s.f ( 1.0f , 1.0f ) ;
s.f ( 1L , 1 ) ;
s.f ( 1L , 1L ) ;
```

22.6 Looking at the Call1 program:

1. Which methods are overridden and which overloaded?
2. What does the program display?
3. What is the significance of the last statement?

22.7 What does program Lookup1 display? Why is this the output?

22.8 What does program Super2 display? Why is this the output?

22.9 What does program Abstract1 display? Why is this the output?

Programming Exercises

22.1 Write a program incorporating all the different varieties of scope that displays the variable and method search algorithm, i.e. verifies the published variable and method lookup rules.
22.2 Write a program based on the outline on page 742 to verify that the most specific rules work when a method with two or more reference type parameters is used.

22.3 Write a program to explore the interaction between member classes, containment and inheritance hierarchies, and overloaded methods and overridden methods.