Required Problems

1. Problem 3.5

**Solution:** With C rules, line 7 refers to the a and b declared on lines 2 and 5, respectively; line 11 refers to the a and b declared on lines 8 and 5, respectively; and line 14 refers to the a and b declared on lines 2 and 3, respectively. The program prints 1 1 3 1 1 2. With C# rules, the compiler should produce use-before-dene errors for a at lines 5 and 7. With Modula-3 rules, line 7 refers to the a and b declared on lines 8 and 5, respectively; line 11 refers to the a and b declared on lines 8 and 5, respectively; and line 14 refers to the a and b declared on lines 2 and 3, respectively. The program prints 3 3 3 1 2.

2. Problem 3.6

**Solution:** 9 4 2 3

3. Problem 3.11

**Solution:** P, B, X, Q, R, A (parameter to R), C (parameter to R), and Z. Note that the parameters and local variable of Q are not in scope, nor is P’s parameter A.