1. In Figure 2.2, three process states are shown. In theory, with three states, there could be six transitions, two out of each state. However, only four transitions are shown. Are there any circumstances in which either or both of the missing transitions might occur?

2. Can the priority inversion problem discussed in Section 2.3.4 happen with user-level threads? Why or why not?

3. In a system with threads, is there one stack per thread or one stack per process when user-level threads are used? What about when kernel-level threads are used? Explain.

4. In Figure 6.1 the resources are returned in reverse order of their acquisition. Would giving them back in the other order be just as good?

5. A system has two processes and three identical resources. Each process needs a maximum of two resources. Is deadlock possible? Explain your answer.