1. Describe some of the challenges of designing operating systems for mobile devices compared with designing operating systems for traditional PCs.

2. Identify several advantages and several disadvantages of open-source operating systems. Include the types of people who would find each aspect to be an advantage or a disadvantage.

3. Some early computers protected the operating system by placing it in a memory partition that could not be modified by either the user job or the operating system itself. Describe two difficulties that you think could arise with such a scheme.

4. Keeping in mind the various definitions of **operating system,** consider whether the operating system should include applications such as web browsers and mail programs. Argue both that it should and that it should not, and support your answers.

5. Describe the differences between symmetric and asymmetric multiprocessing.