

Review Exercises

Chapter 1

1. There are many wireless technologies and systems. Each of them generally is optimized for a specific transmission environment. Draw a figure, in which x-axis and y-axis represent the moving speed and data rate, respectively, to show their relationship.
2. What are the major differences between wireless LANs and PANs?
3. What are the major differences between low-tier and high-tier wireless systems?
4. Do you think public wireless LANs will replace 3G systems?
5. Which wireless systems are/were available in your country?
6. What does *license* mean in cellular networks? Why do we need it?
7. Briefly describe the major technical differences between 1G, 2G, and 3G systems.
8. Briefly describe the relationship between AMPS, IS-41, IS-136, and IS-95.
9. Briefly describe the major technical differences between 3GPP and 3GPP2 systems.
10. Why i-mode is successful in Japan? Provide your perspective.
11. What kinds of services and applications you would like to use in 3G systems?
12. What are the motivations for IP-based wireless networks?