

Review Questions 23

Your Name:

Please print out this form (two-sided, if you can) and write your answers *legibly* in the spaces provided. If you can't write legibly, type.

1. The example of CDMA shown in Figure 6.6 of the textbook shows the first sender transmitting the two data bits 1, followed by -1, while the second transmits the sequence 11. Show the sequence of values that appears on the channel if the first sends -1 then 1 and the second sends 1 then -1. Check that the decoded sequences match what was sent.
2. List two important differences between 2G cellular networks and 3G. List two important differences between 3G and 4G network.

3. Let A be a mobile IP host with a “permanent” address of 1.2.3.4, a home agent at 1.2.3.1 and a current “care-of” address of 2.3.4.5. Let B be a host with address 3.4.5.6 attempting to set up a TCP connection to a server on A . Draw a time-space diagram showing the TCP SYN packet as it travels from B to A and the resulting ACK . Your diagram should include B , the home agent for A , the foreign agent for A , and A itself. Label each arrow in the diagram with the source and destination IP addresses contained in the packets.