

Due: 10/1

Pages 288-294

2, 5, 14, 15, 22, 24, 26, 27

You also need to do the following two problems:

1.
Consider the alternating-bit (also known as stop-and-wait) protocol. Draw a diagram showing that if the network connection between the sender and receiver can reorder messages (that is, two messages propagating in the medium between the sender and receiver can be reordered), then the alternating-bit protocol will not work correctly (make sure you clearly identify the case in which it will not work correctly). Your diagram should have the sender on the left and the receiver on the right, with the time axis running down the page, showing data and ack message exchange. Make sure you indicate the sequence number associated with any data or ack.

2.
Suppose that a Go-Back-N protocol is used, where 3 bits are used for the sequence number. Show, by an example, that a window size $W=8$ will not work.