Hadassah Academic College
Department of Computer Science

Protocols and Computer Networks Exercise 6

A TCP sender runs Reno TCP, and starts sending segments with parameters cwnd = 1 and ssthresh = 15.

The segments pass through a router with a 20-segment buffer. The router can forward 20 segments without delay and drops any segments above 20.

Each segment in a given window (segments sent with the same cwnd) reach the receiver at the same time. The receiver returns a cumulative ACK for the whole window. If a segment is missing or corrupted, the receiver erases all segments following the missing segment and waits for the missing and remaining segments.

The RTO timeout is very long. The sender continues to send new segments until it receives 3 dupACKs.

Complete the following table up to a total of 150 received segments.

Sender			
cwnd	SEQ	dupACK	
1	1000	0	
2	1001	0	
4	1003	0	
8	1007	0	

Router
Dropped
0
0
0
0

Receiver	
New Frames ACKed	ACK
1	1001
2	1003
4	1007
8	1015