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CSC 360
HW 2

1) From Host B to host A, source port number is Y and destination port number is X.

2) These ~~connections~~ requests are not being sent through the same socket at host C. There is a separate socket for each persistent connection. The identifier for all of these sockets is Port 80, but there is different values for source IP that differentiates the sockets.

3A) False. Even if there is no data to be sent back, acknowledgement will still be sent.

3B) False. RcvWindow will change depending on receiver's processing capability

3C) True. Window size is always less than or equal to the buffer size.

3D) False. Sequence number of next segment depends on number of 8-byte characters in current segment.

3E) True. The RcvWindow field does exist in a TCP segment header.

3F) False. This statement would not be true if the estimated RTT is much less than 1.

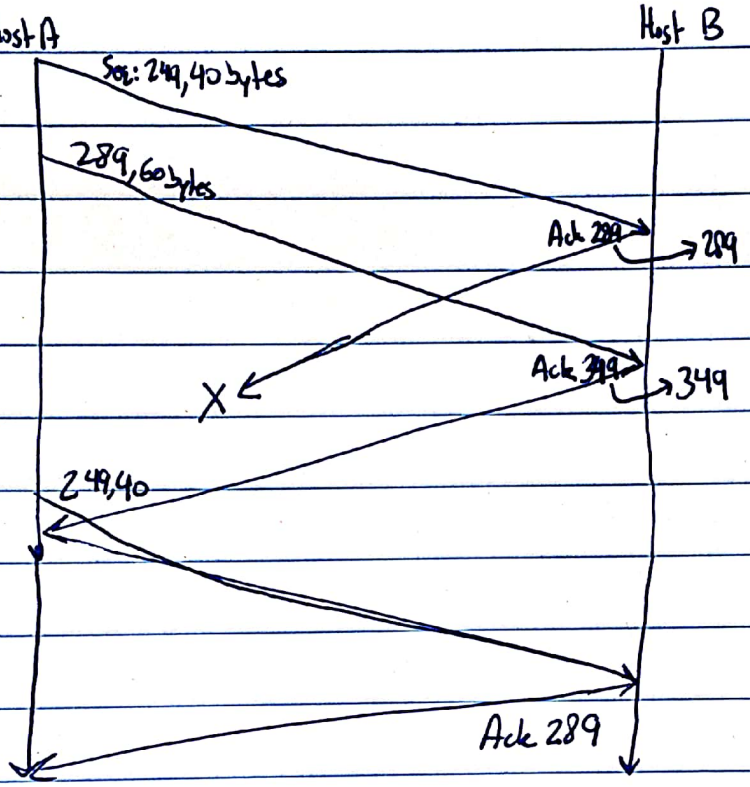
3G) False. The acknowledgement number is just the next segment to be expected. It has nothing to do with sequence number.

4A) Sequence Number = 249+40 = 289.
Source Port = 503
Dest. Port = 80

4B) The acknowledgement number would be 289, the source port # would be 80 & the destination port would be 503.

4C) The acknowledgement # would be 249.

4D)



5A) Slow Start ⇒ Operating ∈ [1,6] and [23,26]

5B) Congestion Avoidance ⇒ Operating ∈ [6,16] and [17,22]

5C) Packet loss recognized by triple duplicate acknowledgement

5D) Packet loss recognized by timeout (window size set to 1).

5E) At 1st transmission round, threshold is 32.

5F) During 18th round, threshold is 21.

5G) During 24th round, threshold is 13.

5H) 70th segment is sent in the 7th transmission round.

5I) Half of current window → size will be 4.