Note: These are only for practices. It doesn't guarantee that the maths coming to the midterm exam will be similar to these questions.

1. A file transfer starts at MSS=1; ssthresh=9; round=0. The system faces a time-out at around 6 and then a 3-dup-ack on round 11.
    a. Identify the MSS size on round 15.
    b. Identify the ssthresh on round 15.
    c. Total of how many bytes were sent till round 15 if each MSS held 3 bytes of data?
2. A file transfer is currently at MSS = 26; ssthresh = 10, rtt = 28
    a. Identify if there was any congestion along the transmission.
    b. If the last congestion occurred due to 3 ACKs, what was the value of RTT at that time?
    c. If the last congestion occurred due to time-out, what was the value of RTT at that time?
3. In TCP Congestion Control, the sender started (at RTT=0) with the slow start and the initial ssthresh was set to 16. Then the following events occurred.
        - Event 1: Time-out occurred at RTT = 9
        - Event 2: 3 Duplicate acks received at RTT = 16
        - Event 3: 3 Duplicate acks received at RTT = 20
        - Event 4: Time-out occurred at RTT = 28
    a. Draw the cwnd vs rtt graph for the above scenario.
    b. Calculate the value of ssthresh at RTT=35.
    c. Calculate the value of cwnd at RTT=35.