- **Print your name.**

- Close-book policy: You may not use the text, my class notes and/or any notes and study guides you have created. You may use a calculator. You may not use a cell phone or computer.

Problem	Points	Score
1	1	
2	1	
3	1	
4	1	
5	1	
Total:	5	

1. (1 point) A TCP sender can detect a "loss event" by

    A. timeout

    B. duplicate ACKs

    C. ACK with ECE (explicit congestion notification echo) bit

    D. all of the above

2. (1 point) TCP fast recovery can be triggered by

    A. timeout

    B. duplicate ACKs

    C. new ACK

    D. all of the above

3. (1 point) In TCP congestion control, a timeout event will always transition a sender to the slow start state.

    A. True   B. False

4. (1 point) Two TCP connections can always achive fair share of a bottleneck network link.

    A. True   **B. False**

5. (1 point) Two applications can achive fair share of a bottleneck network link as long as they are both running over TCP.

    A. True   **B. False**