University of California, Berkeley   April 15, 2013
College of Engineering   **Quiz #3**   Anthony D. Joseph
Computer Science Division – EECS   **Solutions**   CS162 Operating Systems

Your Name:	
SID:	CS162 login:
TA:	Discussion Section:
Score:	

This is a **closed book and notes** ten-minute quiz. Write all of your answers directly on this paper.

Good Luck!!

1. (6 points total) True/False. Circle the correct answer for each of the following questions.
   a. IP's "Best Effort" packet delivery uses retransmissions to ensure that packets are delivered.

   # TRUE   FALSE
   False. Best effort makes no extra effort to deliver packets.

   b. According to the General's Paradox, messages over an unreliable network cannot be used to guarantee that two entities do something simultaneously.

   # TRUE   FALSE
   True. There is no way to guarantee that the last message gets through.

2. (6 points) Which of the following one or more properties is **NOT** provided by TCP?
   1. Reliable, in-order, at most once delivery
   2. Guaranteed bandwidth
   3. Stream oriented
   4. Flow control
   5. Packet oriented
   6. Congestion control
   7. Two-way communications
   8. Guaranteed latency

   _____   *#2, #5, #8 are not provided by TCP.*

3. (8 points) Which of the following one or more properties **ARE** provided by transactions?
   1. Isolation
   2. Replication
   3. Conflict serializability
   4. Consistency
   5. Concurrency
   6. Atomicity
   7. Durability
   8. Reliability

   _____   *Transactions provide #1, #4, #6, #7.*