Data Communication and Networks	**Quiz 5: TCP (1)**
CSCI-351 Fall 2019	**October 17, 2019**

You have 10 minutes to complete this quiz.

Name: Grading Key

RIT Username: _____

Problem	Possible	Score
1	10	
2	5	
3	5	
Total	20	

1. TCP packets are being sent from a client to a server. The MSS is equal to 1460 bytes, and each TCP packet is sent with the maximum capacity. How many TCP packets can be sent before the sequence number field in the TCP header will wrap around? (10 pts)

There are 2^{32} sequence numbers, so $2^{32}/1460$ = approx. 2941758 packets.

2. Suppose we are using a sliding window protocol with a window size of 128 KB and a round-trip time of 100 milliseconds. What is the expected sending rate of this protocol? (5 pts)

128 KB/100 ms = 1280 KB/s = 1.28 MB/s.

3. Suppose that a TCP connection at a sender has a receiver's advertised window of r and a congestion window of c. What is the value of the sender's window? (5 pts)

min(r,c)