1) (5 pts) Chapter 6 Text Book Problem 16 – use 1KB = 1024 Bytes, 1MB = 1024^2 Bytes
a) Slow start will double number of packets for transmitting upon receiving acks for the previous window size number of packets that have been transmitted. The number sent is 1, 2, 4, 8, etc
b) You can continue to use slow start increasing the window size until the pipe is full which will limit how many packets are sent for each RTT. (The send window size can exceed the pipe full level, but only the pipe full number of packets can be sent per RTT)
c) Latency given(50 mS) is ½ the RTT (100 mS). Effective throughput in bits/second – use number of bits sent divided by latency*number_of_RTT

2) (5 pts) Chapter 6 Text Book Problem 19. Consider bytes for size as opposed to packets. Remember an ack for packets may be for multiple packets if a packet has been delayed.

3) (5 pts) Chapter 6 Text Book Problem 21.

4) (5 pts) Chapter 6 Text Book Problem 34. Look at solution to problem 35. A) use the fact that Pcount can be written as TempP/(1/TempP – count). B) if P1 is the probability packet for count 1 is dropped, then (1-P1) is the probability the packet is not dropped.

The following problems are extra problems that you should consider working.

A) Chapter 6 Text Book Problem 35