P40：

a.TCP slow start is operating in the intervals (1,6) and (23,26).

b.TCP congestion avoidance is operating in the intervals (6,16) and (17,22)

c.After the 16th transmission round,the segment loss is detected by a triple duplicate ACK.Because the congestion window size is cut in half.

d.After the 16th transmission round,the segment loss is detected by a timeout.Because the congestion window size is set to 1.

e.The initial value of ssthresh at the first transmission round is 32.The ssthresh is the end of the slow start.

f.The value of ssthresh at the 18th transmission round is 21.Because the threshold is set to half the value of the congestion window when packet loss is detected.The loss is detected during the 16th transmission round and the window size is 42,so the value is 21.

g.The value of ssthresh at the 24th transmission round is 14.5.the reason is same as above.

h.packet 70 is sent in the 7th transmission round.1+2+4+8+16+32+33=99,1+2+4+8+16+32=66.So 70 is in the 7th transmission round.

i.The congestion window size is 7 and the ssthresh is 4.Because the ssthresh is set to half of the current congestion window size,and the new window size is the threshold +3.

j.Threshold is 21 and the congestion window size is 4.

k. 1+2+4+8+16+21=52.52 packets were sent out.

P44：

1. Because it increases linearly,so from 6 MSS to 12 MSS needs 6 RTTs.
2. (1+2+3+4+5+6)/6=2.667MSS/RTT.