

CS521-HW1

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5

a:time= $150/100*60+10/5*3=96\text{min}$

b:time= $150/100*60+8/5*3=94.8\text{min}$

6:

a:m/s

b:L/R

c:m/s+L/R

d:The bit begin to leave the host A

e:The bit is in the link from A to B, but not reached to the b

f:The bit has reached the b

g:m/s=L/R $m=120/56k*2.5*10^8=5.35*10^4$

11:

$d_{\text{end-to-end}}=L/R+d1/s1+d2/s2+d3/s3=6+20+16+4=46\text{ms}$

12:

$d_{\text{queue-delay}}=1500*4.5*8/2M=27\text{msec}$

$d_{\text{queue-delay}}=L/R*n+(L-x)/R$

24:

$d_{\text{transmit-time}}=40*8*10^{12}/(100*10^6)=3200000\text{seconds}=37\text{days}$
so I will use the FedEx overnight delivery. It is fast and cheap.