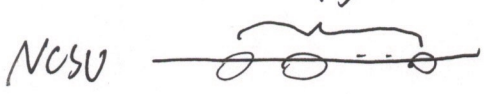
T2.




~~$t_{switching} = 50us$~~

$v = 2\times10^8 m/s$

$d_{prop} = \frac{5\times10^6 m}{2\times10^8 m/s} = 25ms.$

$d_{trans} = 50us.$

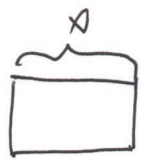
$d = 50us + 15\times50us + 25ms = 800us + 25ms$

$= 25.8ms.$

~~$L = n\times p$~~

$p \times n = L.$

T3.




x bits long

p bits

b bps.

k-hop.

见二张背面

setup time: s

prop ---: d.

# $n = \frac{x}{p}$.

~~pkt-switching~~: $T = \frac{p}{b}\times\frac{x}{p} + (n-1)\times\frac{p}{b} + n\times d$

Circuit-switching: $T = s + \frac{p}{b}\times n + k\cdot d.$

$= s + \frac{p}{b}\times\frac{x}{p} + \frac{x}{p}\times d$ ①

$= s + \frac{x}{b} + \frac{x}{p}\cdot d.$