

$$(AA2)_n = 1010 | 1000 | 0010$$

Cec

$$x^5 + x^3 + x = 101010$$

$$1010 \ 1010 \ 00 \ 10000000 : 101010 =$$

$$\begin{array}{r} 101010 \\ \underline{000000} \end{array}$$

$$\begin{array}{r} 100010 \\ \underline{101010} \\ 00100000 \\ \underline{101010} \\ 10100000 \\ \underline{101010} \\ 10000000 \\ \underline{100000} = 2(x) \end{array}$$

$$1010 \ 1010 \ 0010 : \underline{\underline{00100}}$$

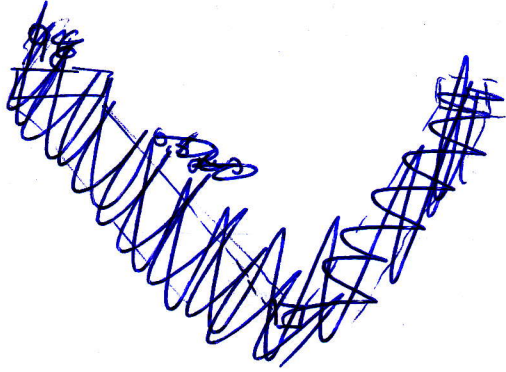
$$c = 1 \text{ Mb/s}$$

$$t_{aq} = 0,5 \mu\text{s}$$

12 B packet

$$5 \cdot 10^{-7} \text{ s}$$

96 b



$$\frac{96}{1000000}$$

$$\frac{96}{1000000}$$

$$96 \cdot 10^{-5}$$

$$t_v = \frac{96}{10000000} = 9,6 \cdot 10^{-5} \text{ s}$$

$$t = t_v + 2 \cdot t_{aq} = 9,6 \cdot 10^{-5} + 2 \cdot 5 \cdot 10^{-7} = 9,7 \cdot 10^{-5} \text{ s}$$

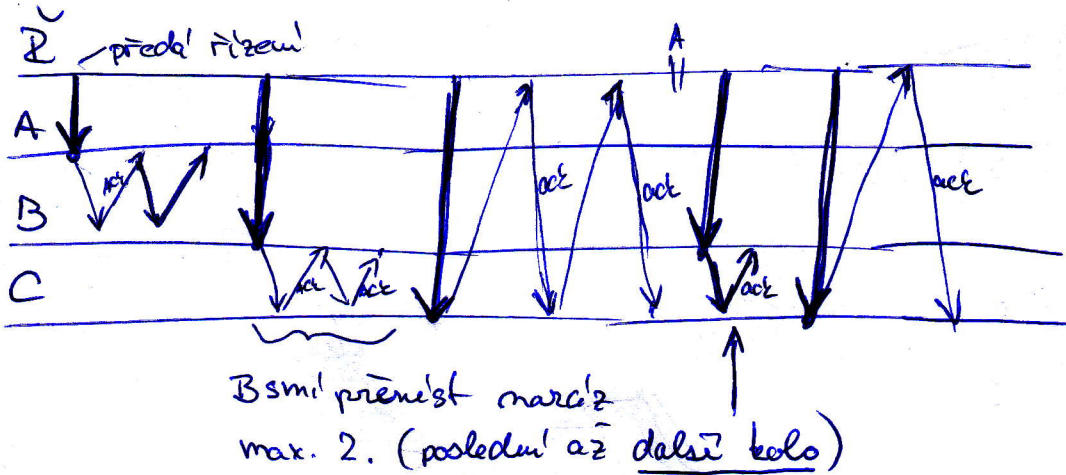
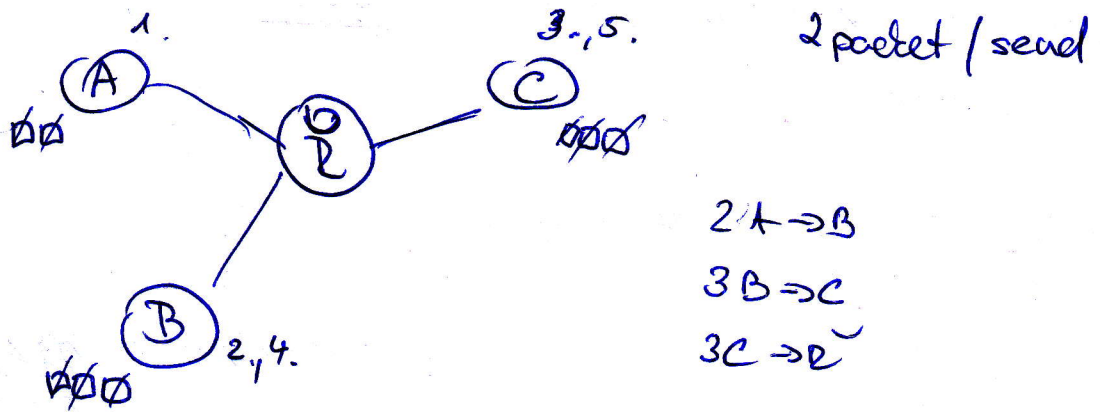
$$\eta_{\text{cinost}} = \frac{t_v}{t} = \frac{9,6 \cdot 10^{-5}}{9,7 \cdot 10^{-5}} = \frac{96}{97} = 0,98 \text{ [%]}$$

$$C_{EF} = \eta_{\text{cinost}} \cdot c = 0,98 \cdot 1000 \text{ kbit/s} = 980 \text{ kbit/s}$$

$$F_{aq} = l/m$$

$$5 \cdot 10^{-7} = l/c$$

$$l = 5 \cdot 10^{-7} \cdot 10^6 = 0,5 \text{ m}$$



efektivní přenosová rychlost

stop/start
x 8N1

$C = 12 \text{ Mb/s}$

parita:
N - žádná
S - sudá
L - lichá

$C_{EF} = \frac{\text{data}}{\text{data} + \text{START} + \text{STOP} + \text{PARITA}} \cdot C$

$C_{EF} = \frac{8}{10+1+1+0} \cdot 12 \text{ Mb/s}$

$C_{EF} = 0,8 \cdot 12 \text{ Mb/s}$

$C_{EF} = 9,6 \text{ Mb/s}$

Kapacita kanalu

$$W = 2,4 \text{ MHz}$$

$$\frac{S}{N} = 15 \left(\frac{\text{signal}}{\text{šum}} \right)$$

V - počet
úrovni/stavů

$$C = W \cdot \log_2 \left(1 + \frac{S}{N} \right)$$

$$C = W \cdot \log_2 V$$

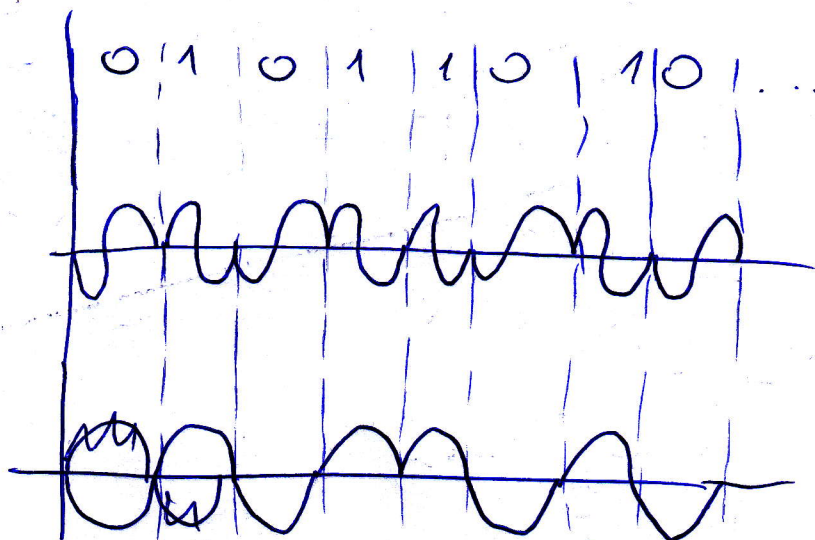
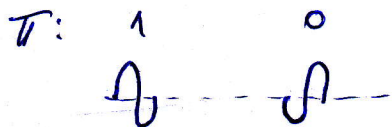
$$C = 2,4 \cdot 10^6 \cdot \log_2(16)$$

$$C = 4 \cdot 2,4 \cdot 10^6$$

$$C = 9,6 \cdot 10^6 \text{ b/s} = 9,6 \text{ Mb/s}$$

Fázová modulace

010110101101



-eg == -le MENŠÍ NEŽ (POM = POKR.)
 -he != -ee MENŠÍ ROVNO
 -gt VĚTŠÍ NEŽ -ge VĚTŠÍ ROVNO

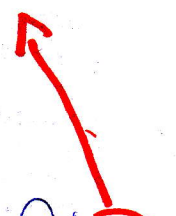
nibly = 4 bity
 oktet = 8 bitů

1B	1000	0	1
	0110		1
1B	1010		0
	0101		0
0101			0

každá 9. číslice je parita

licion

1	0	1	0	0	1	0	1	1
1	0	0	0	1	1	1	1	1
0	0	1	1	1	0	0	0	0
1	0	1	0	0	0	1	0	0
0	1	0	0	1	1	1	1	1



chyba

že

