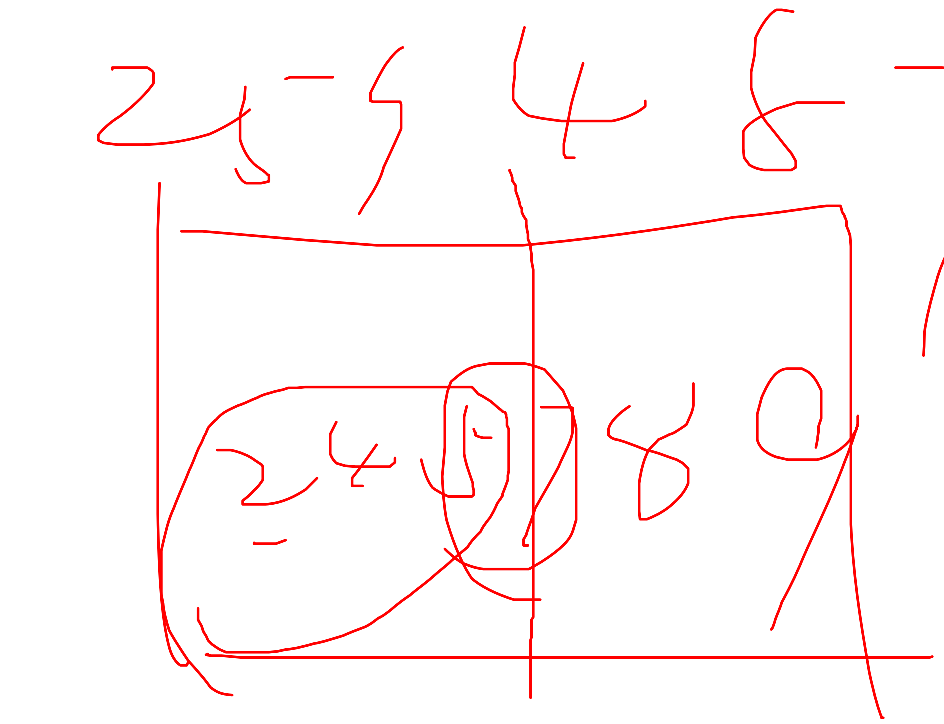

2 4 5

$$P(Y=c_k \mid X=x)$$

联合

$$= \frac{P(Y=c_k \cap X=x)}{P(X=x)}$$

$$= \frac{\boxed{P(X=x \mid Y=c_k)}\, P(Y=c_k)}{P(X=x)}$$

$$P_e = \frac{错误接收的码元数}{传输的总码元数} = \frac{N_e}{N}$$

误接收的比特数在传输总比特数中所占的比例，

$$P_b = \frac{错误接收的比特数}{传输的总比特数} = \frac{I_e}{I}$$

错误码元

$$P_b = \frac{\frac{2}{\log M}}{\log_2 M} = \frac{小}{大}$$

元

$$\log(p(y|x)) - w_0 - \sum w_i f_i(x)$$

$$= \exp\left(\sum w_i f_i(x, y) + w_0 - 1 \right)$$

$$= \exp\left(\sum w_i f_i(x, y) \right)$$

$$\overline{}$$

$$1 = \frac{\sum e\left(\sum w_i f_i(x, y)\right)}{e(1 - w_0)}$$

$$e(1 - w_0) = \sum e\left(\sum w_i f_i(x, y)\right)$$

$$P_w(y|x) = \frac{e\left(\sum w_i f_i(x, y)\right)}{\sum e\left(\sum w_i f_i(x, y)\right)}$$

$$L(P,w)=\sum_{i=1}^{5}P(y_i)\log P(y_i)+w_1\left(P(y_1)+P(y_2)-\frac{3}{10}\right)+w_0\left(\sum_{i=1}^{5}P(y_i)-1\right)$$

$$2e^{-w_1-w_0-1}+3e^{-w_0-1}$$

$$y_i(b)-1\geq 0$$

$$y_1 b-1\geq 0$$

$$y_2 b-1\geq 0$$

$$b\geq\frac{1}{y_1}\qquad b\leq-\frac{1}{y_2}$$

$$
\min_{w,b} \quad \frac{1}{2}\|w\|^2
$$

$$
\text{s.t.} \quad y_i(w \cdot x_i + b) - 1 \geqslant 0, \quad i = 1, 2, \cdots, N
$$

$$
\text{minimize} \quad \max_{i=1,\cdots,k} |a_i^T x - b_i|. \tag{1.6}
$$

$$
t = \max_{i=1\sim k} |a_i^T x - b_i|
$$

[illegible] $\min t$

$$
t \geq |a_i^T x - b_i|
$$

$$
\boxed{\begin{array}{l} a_i^T x - b_i \leq t \\ b_i - a_i^T x \leq t \end{array}}
$$

$\bar{a}_i - t\,\theta \leq \theta\, b_i$

$t^{p} y = 0$

$x^{p} \underline{y} = 0$

$$\frac{\partial}{\partial\theta}\left(\bar{a}_i^T \theta - b_i\right)^2$$

$$= \frac{2\left(a_i^T x - b_i\right) \cdot a_i}{2}$$

$$= \left(a_i^T\right) \geq 0$$

{'id': 41,
'key': [__ , __ , __ , __ .]
 }

$\{1: 2,\ 3: 4\}$

$$h_k(n) = h_0(n-k)$$

大	小	小
火	大	大
小	小	大
大	大	小

$$\overline{e^{ix}} =$$

$$e^{ix} = \cos x + i\sin x$$

$$\overline{e^{ix}} = \cos x - i\sin x$$

$$e^{-ix} = \cancel{e}\;\cos x + i\sin(-x)$$

$$\overline{e^{ix}} = e^{-ix}$$

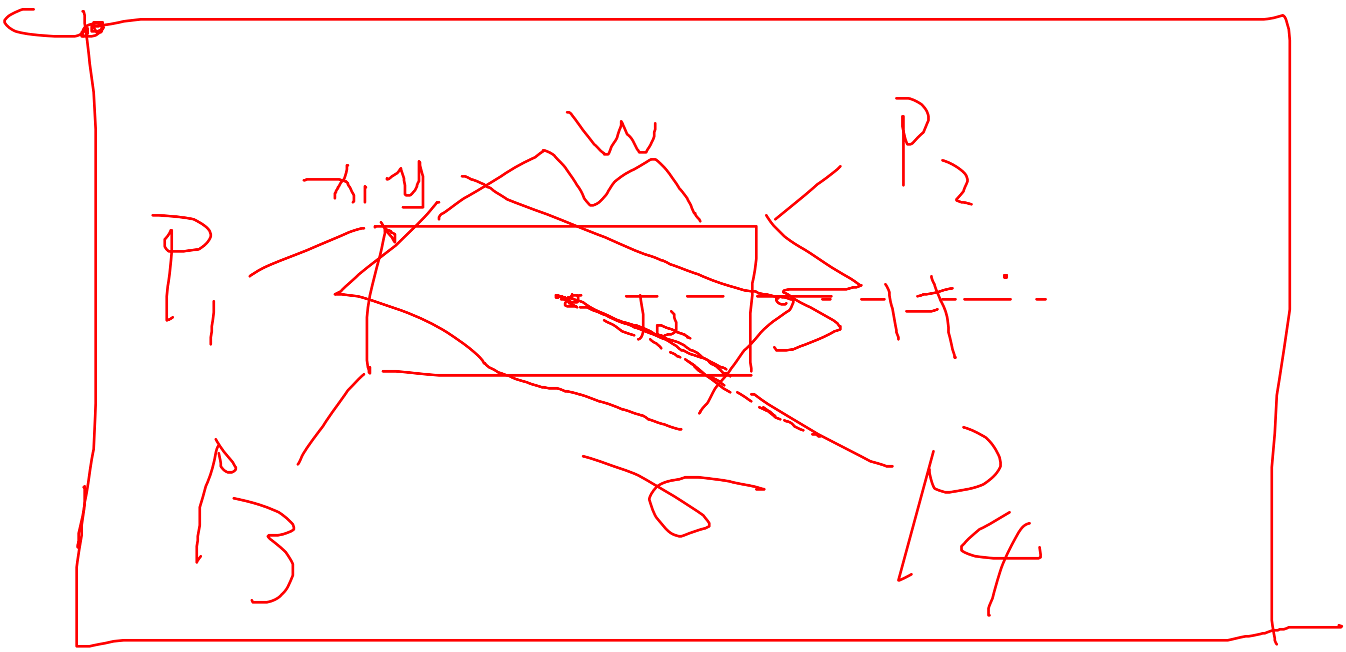

Fig 5.6 P_1', P_2', P_3', P_4'

中心：$\left(x+\frac{w}{2},\ y+\frac{h}{2}\right)$

$$\frac{d^2}{dt^2}i(t)+7\frac{d}{dt}i(t)+10i(t)$$
$$=2\delta'(t)+12\delta(t)+16u(t) \quad (2-24)$$

$i(0^+)-i(0^-)=a(\Delta u(0^+)-\Delta u(0^-))$

$i(t)=a\,\Delta u(t)=a$

$$i(0^+) = a\Delta u(0^+)$$

$$\frac{d}{dt}i(t) = a\delta(t) + b\Delta u(t)$$

$$\frac{d}{dt}i(0^+) - \frac{d}{dt}i(0^-)$$

$$= a(\delta(0^+) - \delta(0^-)) + b$$