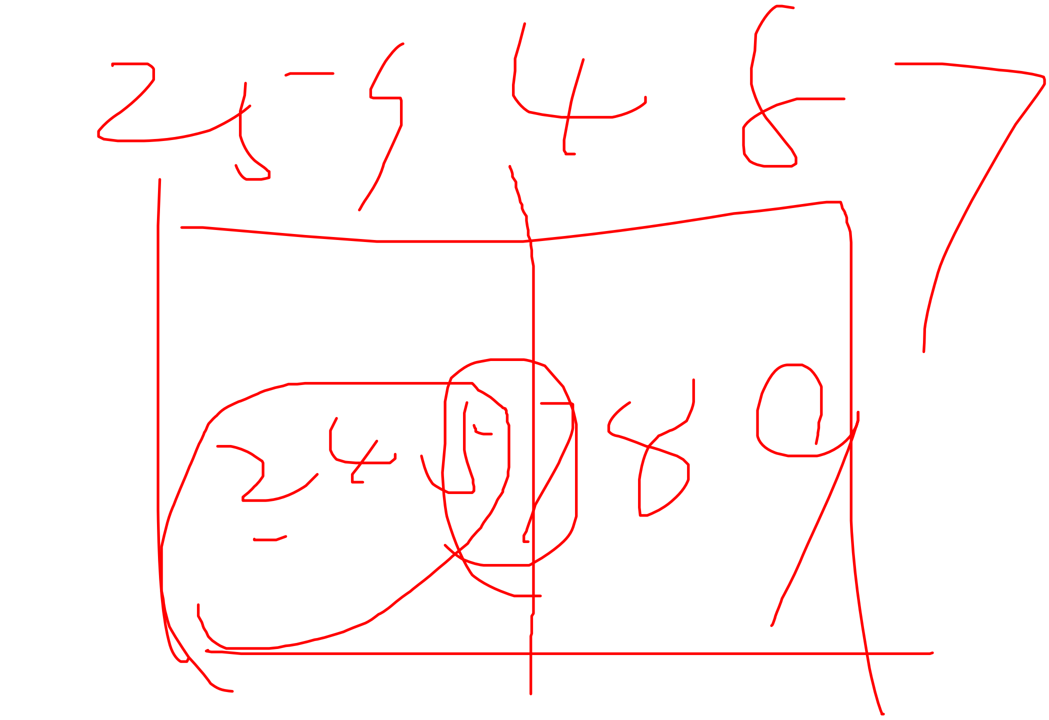


2 4 5

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

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

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

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

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

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

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

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

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

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

$$y_i(\quad b)-1\ge 0$$

$$y_1 b\,9\ge b$$

$$y_2 b\,9\,8\ge 9$$

$$b\ge\frac{1}{y_1}\qquad b\le-\frac{1}{y_2}$$

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

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

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

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

若 $\min t$

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

$$\boxed{\begin{aligned} a_i^T x - b_i &\leq t \\ b_i - a_i^T x &\leq t \end{aligned}}$$

$$a_i^T x - t \leq b_i$$

$$t\ {}^{p}f = 0$$

$$x\ {}^{p}f = 0$$

$$(a_i^T x - b_i)^2$$

$$= 2(a_i^T x - b_i) \cdot a_i$$

$$\underline{\quad 2 \quad}$$

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

{rid: 41

key: [

{1:2, 3:4}

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

| | | |
|---|---|---|
| 大 | 小 | 小 |
| 小 | 大 | 大 |
| 小 | 小 | 大 |
| 大 大 | 小 | |

$$e^{ix} =$$

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

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

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

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

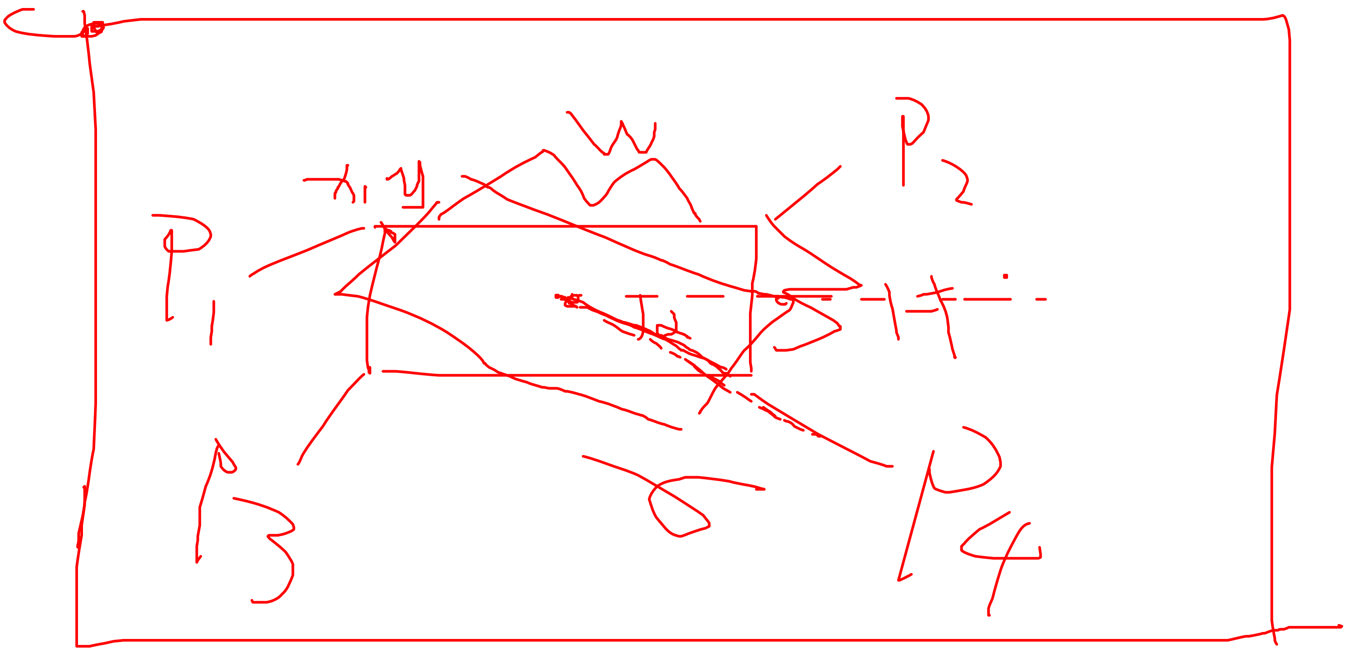


Fig 56 $P_1'$, $P_2'$, $P_3'$, $P_4'$

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

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

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

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

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

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

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

$$= a\left[\delta(0^+) - \delta(0^-)\right] + b$$

G = 收益 gold

R: 奖励 reward

A: 动作 action

π: 策略 policy

V: 价值 V(s) value

$q_\pi(s,a)$ 价值

$q_a - V$

1月DP解：

$$\lim_{n\to\infty}\sum \int_{-\frac{T}{2}}^{\frac{T}{2}} f(\tau)\, e^{-i\omega t}\, dt\, e^{i\omega t}\, \frac{W}{n}$$

$$w = \frac{2n\pi}{T}$$

$$dw =$$

$$= \frac{1}{2\pi}\lim_{T\to+\infty}\sum_{n=-\infty}^{+\infty}\int_{-\frac{T}{2}}^{\frac{T}{2}} f(\tau)\mathrm{e}^{-\mathrm{i}\frac{2n\pi}{T}\tau}\mathrm{d}\tau\ \mathrm{e}^{\mathrm{i}\frac{2n\pi}{T}t}\frac{2\pi}{T}$$

$$= \frac{1}{2\pi}\int_{-\infty}^{+\infty}\int_{-\infty}^{+\infty} f(\tau)\mathrm{e}^{-\mathrm{i}\omega\tau}\mathrm{d}\tau\ \mathrm{e}^{\mathrm{i}\omega t}\mathrm{d}\omega.$$

$$\lim_{T\to+\infty}\sum_{n=-\infty}^{+\infty}\int_{-\frac{T}{2}}^{\frac{T}{2}} f(\tau)e^{-inw}d\tau\, e^{inwt}\, w$$

$$w \to 0$$

$$\int_{-\infty}^{\infty} \frac{\sin x}{x}\, dx = \pi$$

$$\cos x = -\sin x$$