

$$f(\theta) \quad (p(\theta|y))$$

$$\theta = (\theta_1^T, \dots, \theta_k^T)^T$$

$$f(\theta_k | \dots) = f(\theta_k | \theta_{(-k)})$$

možna! priča: $f(\theta_k | \dots) \propto \underline{q(\theta_k)}$

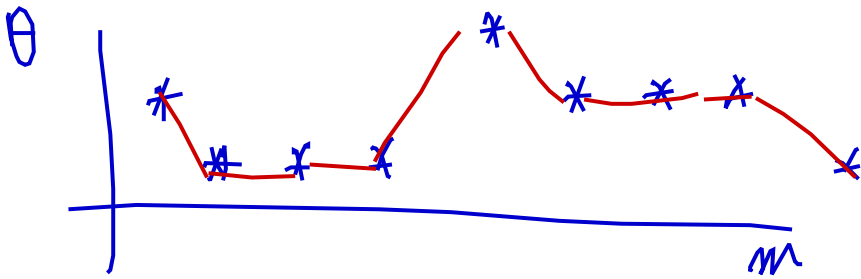
Chci generovat $\propto f(\theta)$

1. $\theta^{(0)}$ (= nějaký starý $m=1, 2, \dots$)

2. generuj ψ a $q^*(\psi; \theta^{(m)})$

$$\alpha = \text{norm} \left(\frac{f(\psi) q^*(\psi; \theta^{(m)})}{f(\theta^{(m)}) q^*(\psi; \theta^{(m)})} \right) \quad 14$$

4. $\theta^{(m+1)} = \begin{cases} \psi & \text{přes } \alpha \\ \theta^{(m)} & \text{přes } 1-\alpha \end{cases}$



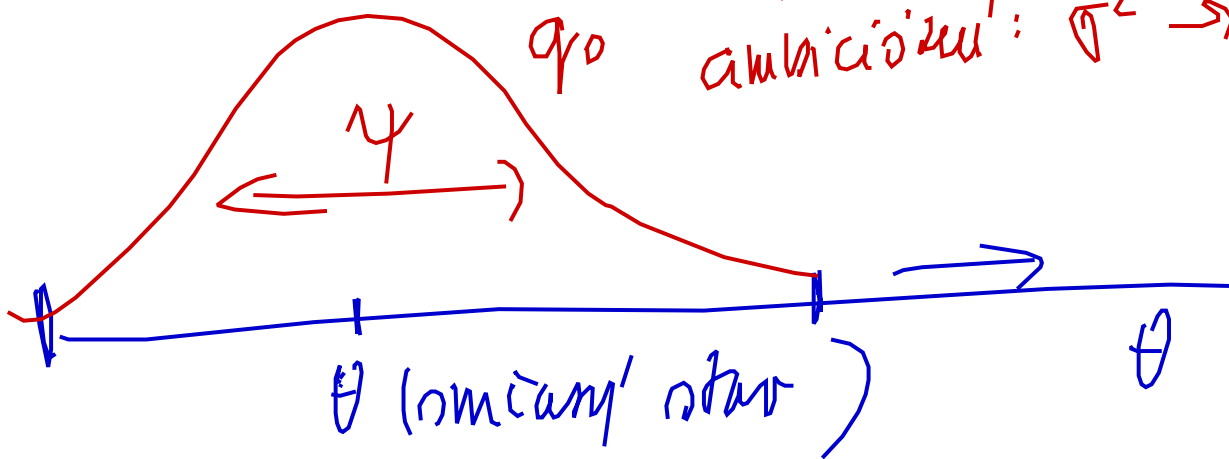
$q(\psi, \theta^{(m)}) =$ "prst. namku
 $\theta^{(m)}$ "jam-li"
 $\sim \psi$ "

nejbežnejši' volba naimhove' husty;
 nahodna' prohažba

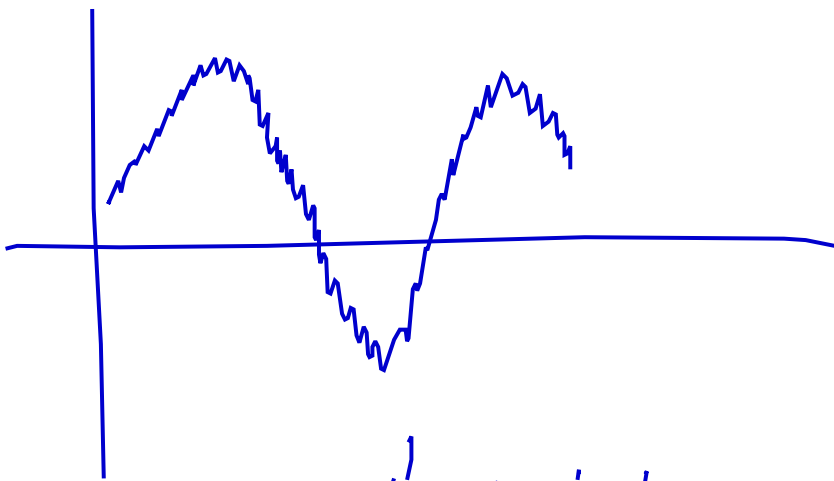
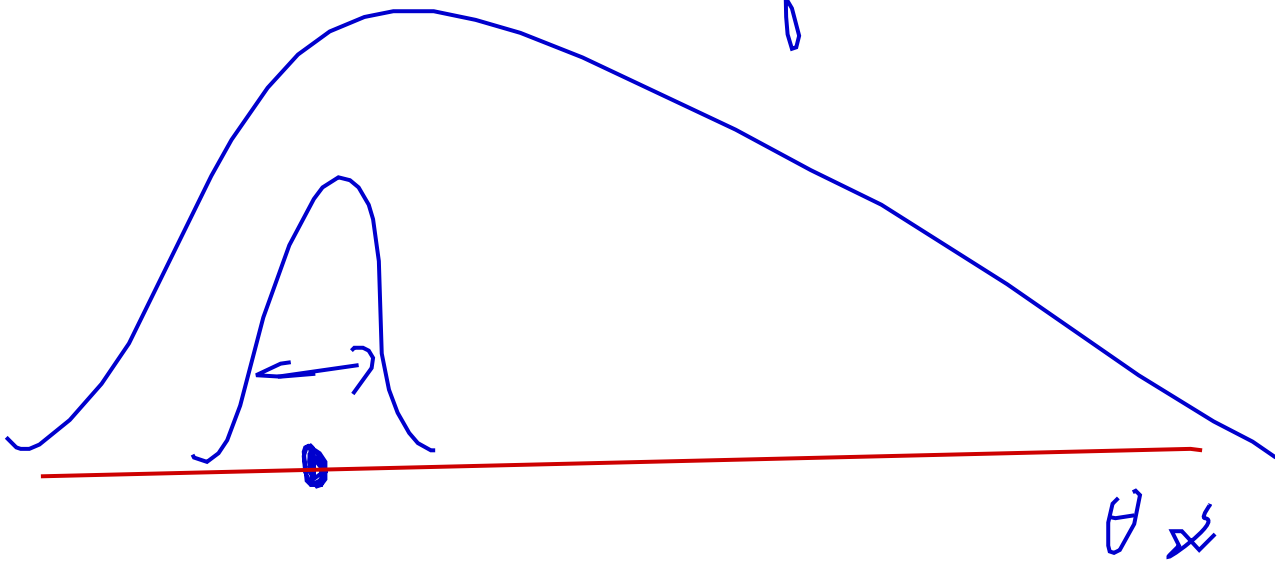
$q(\theta, \psi) \equiv$ "prst. namku ψ ,
 $= q_0(\psi - \theta)$ kedyž jsm $\sim \theta$ "

mapi $q_0 \sim N(0, \sigma^2)$

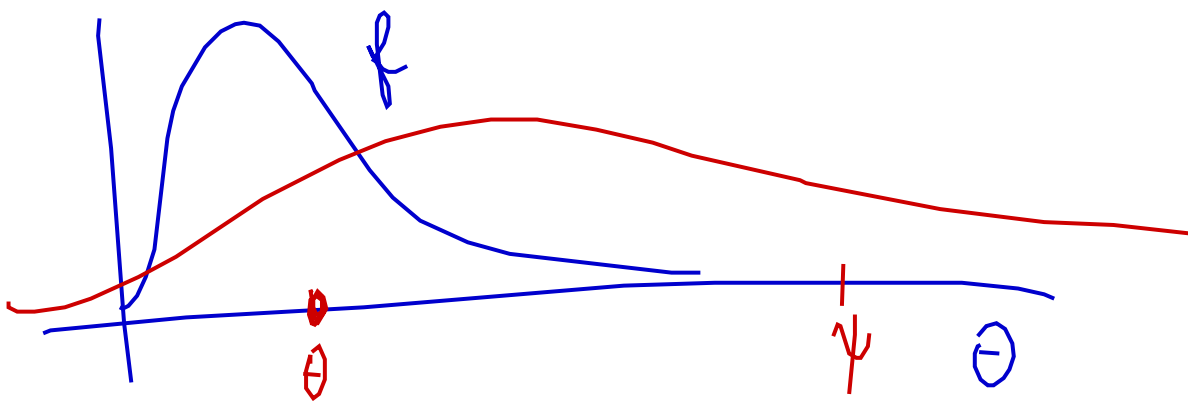
opatne': $\sigma^2 \sim 0$
 ambicioznejši': $\sigma^2 \rightarrow \infty$



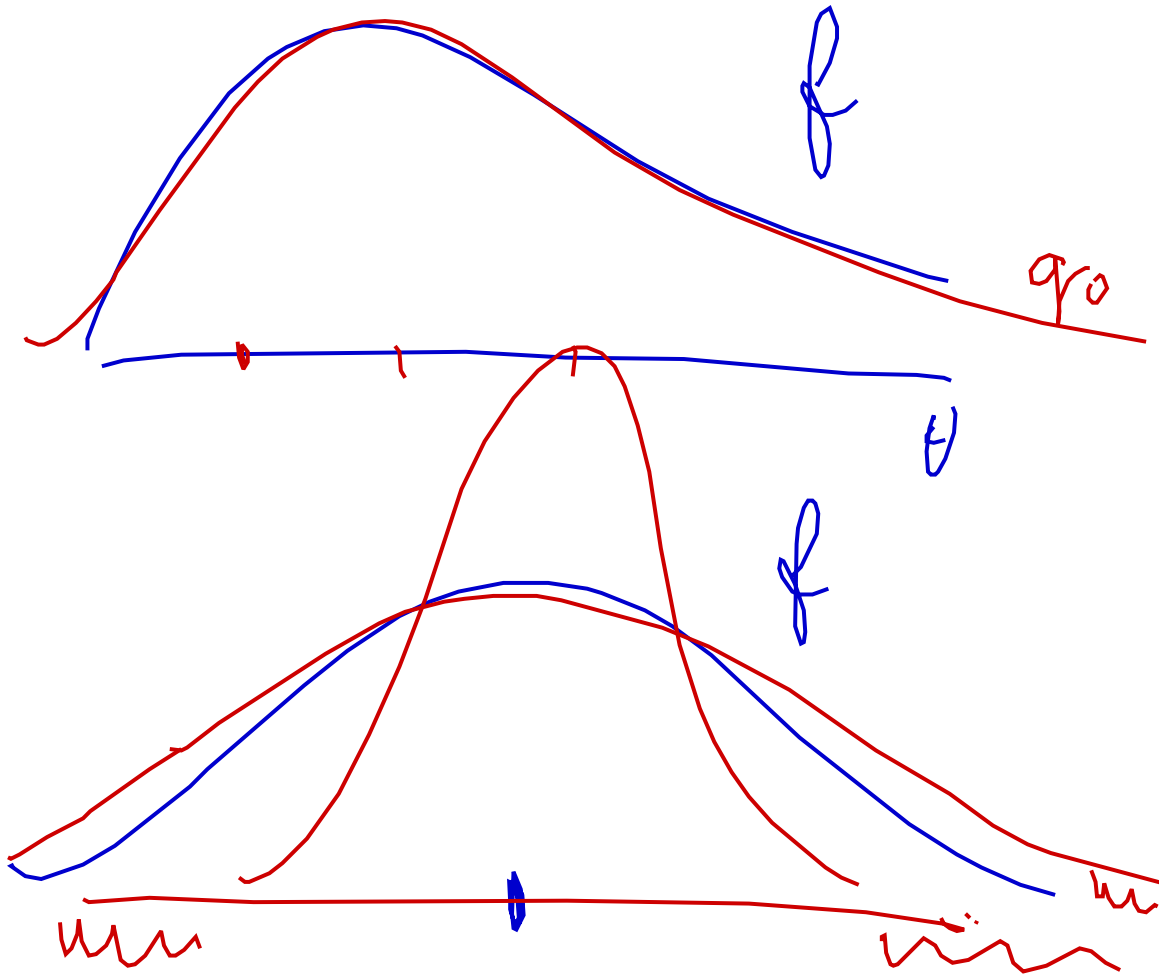
$$f \equiv a'l$$

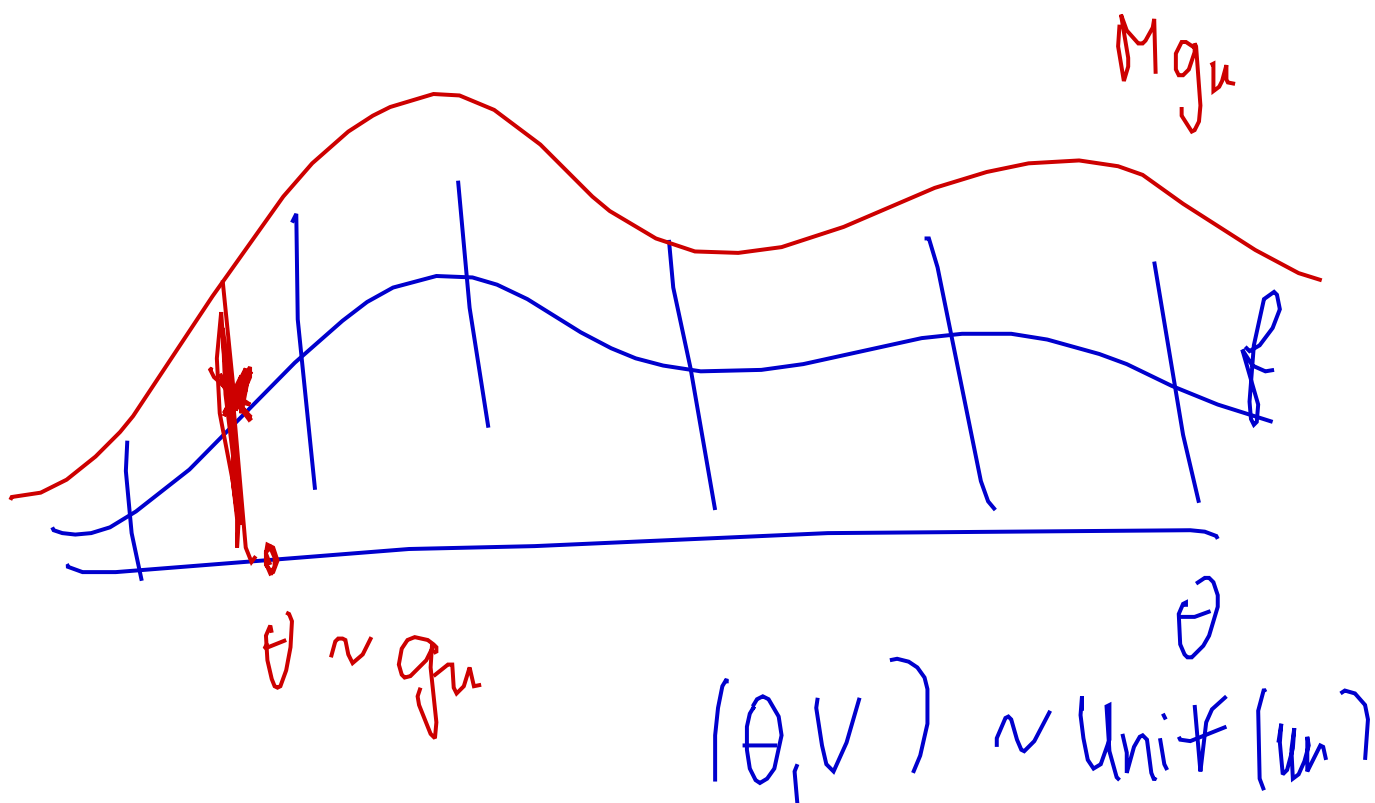


amplifici'zul' mairh

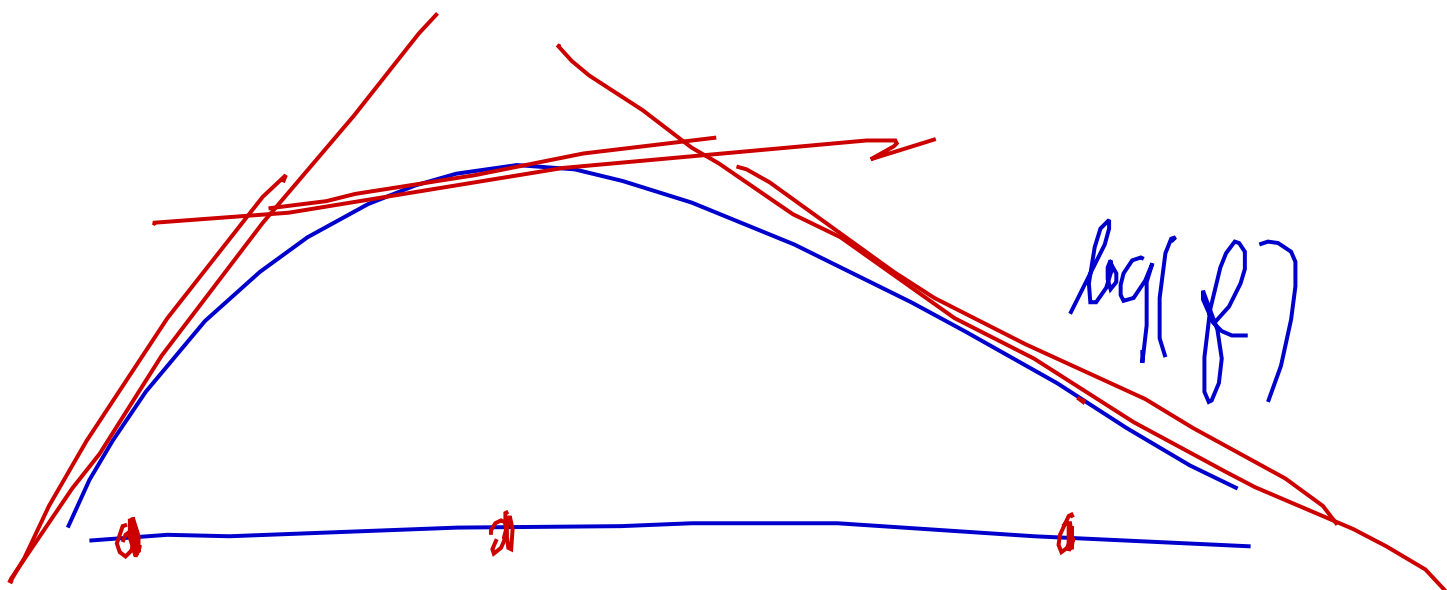


(a) resavidez'

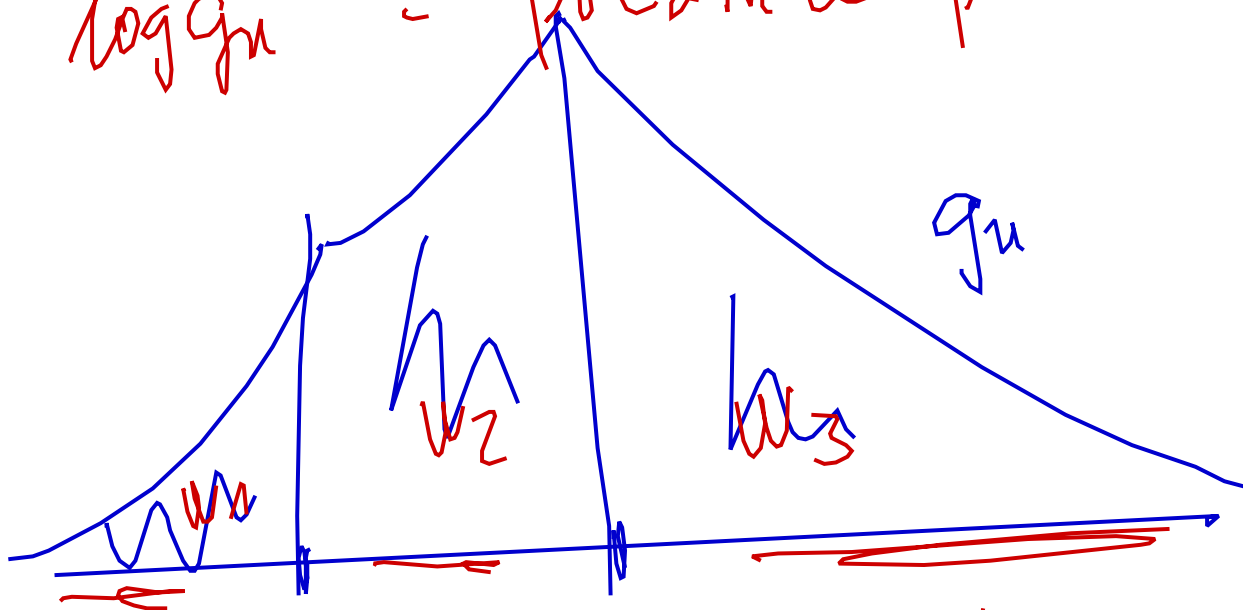




θ přijmí do výběru θ a f
 a prsk'
 $\frac{f(\theta)}{M \cdot g_u(\theta)}$
 \uparrow



$\log g_n \equiv$ početné prírodné



(a) $Z \sim \text{Discr } 1, 2, 3, 4$

(b) distrib. fce useknu. rozd. P.

$F(y) =$ distrib. fce množstva

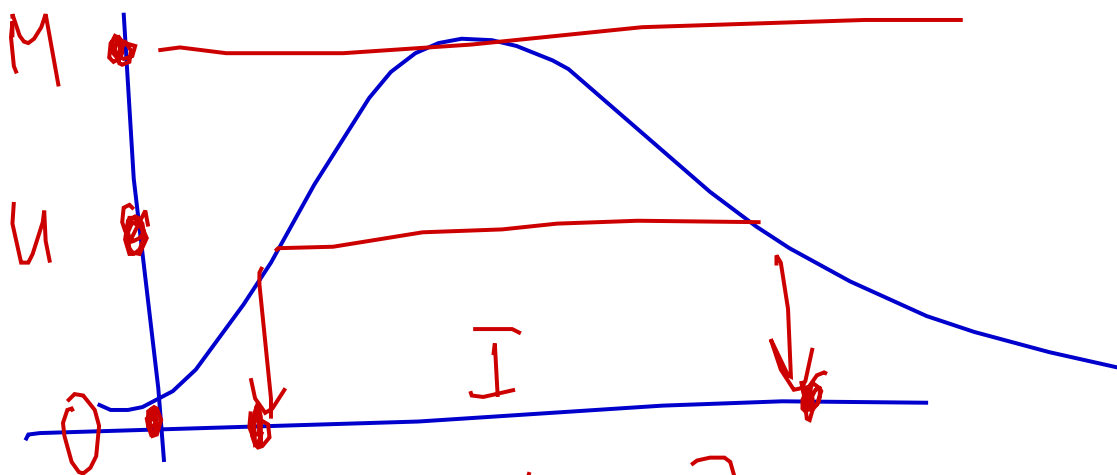
$F^*(y) =$ d. fce useknuťho $n \in (a, b)$

$$F^*(y) = \frac{F(y)}{F(b) - F(a)} \quad | y \in (a, b)$$

$$= 0$$

$$= 1$$

slice sampling



(a) $u \sim (0, M)$

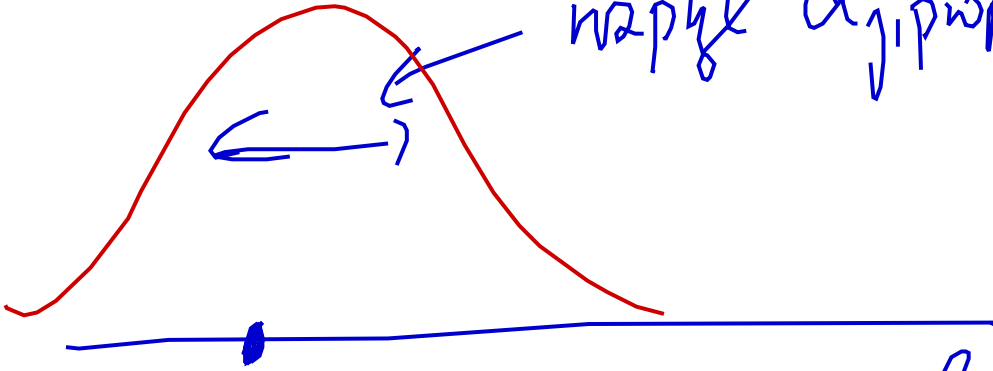
(b) generatej numerički z I

Lin. model

μ -H pro β

na'ho dera' pro dera'zha

napyl α_j^2 pwp



↑ smeyay' star velenee β_j