2010-03-17
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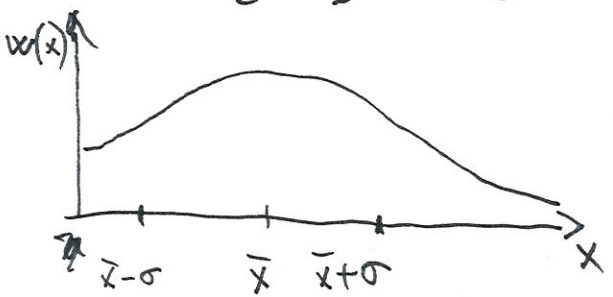
STATISTIKA

i	1	2	3	4	5	6	7	8	9	10	...
x_i	1	2	5	5	3	1	1	4	3		...

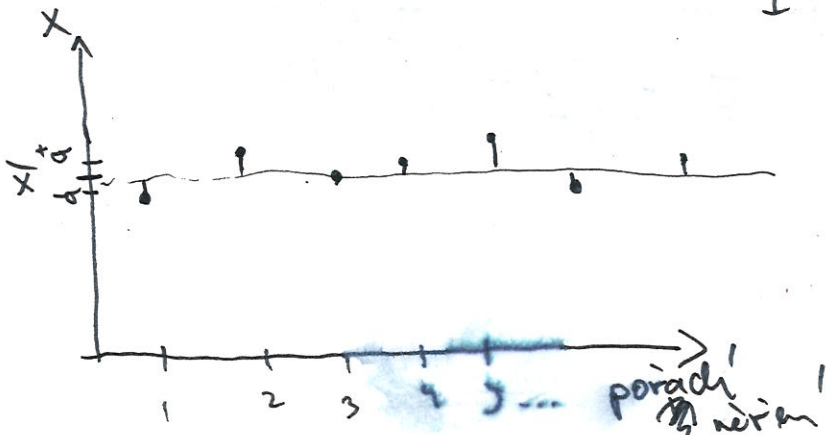
$\rightarrow$ w_1 5, w_2 3, w_3 4

$$\bar{x} = \frac{1}{N}\sum_{i=1}^{N} x_i = \frac{1}{w_1+w_2+\dots}\left(1\cdot w_1 + 2\cdot w_2 + 3\cdot w_3 \dots\right) = \frac{\sum_{i=1}^{5} w_i \cdot i}{\sum_{i=1}^{5} w_i}$$

$$m = \int w(x)\cdot x^0 \, dx$$



$$\bar{x} = \frac{\int w(x)\cdot x \, dx}{\int w(x)\, dx}$$



$$I = \frac{\int w(x)(\bar{x}-x)^2 \, dx}{\int w(x)\, dx} \Rightarrow \sigma^2 = \frac{\sum_{i=1}^{M} w_i (x_i - \bar{x})^2}{\sum_{i=1}^{M} w_i}$$

σ^2 ... rozptyl

σ ... směrodatná odchylka (střední kvadratická deviace)