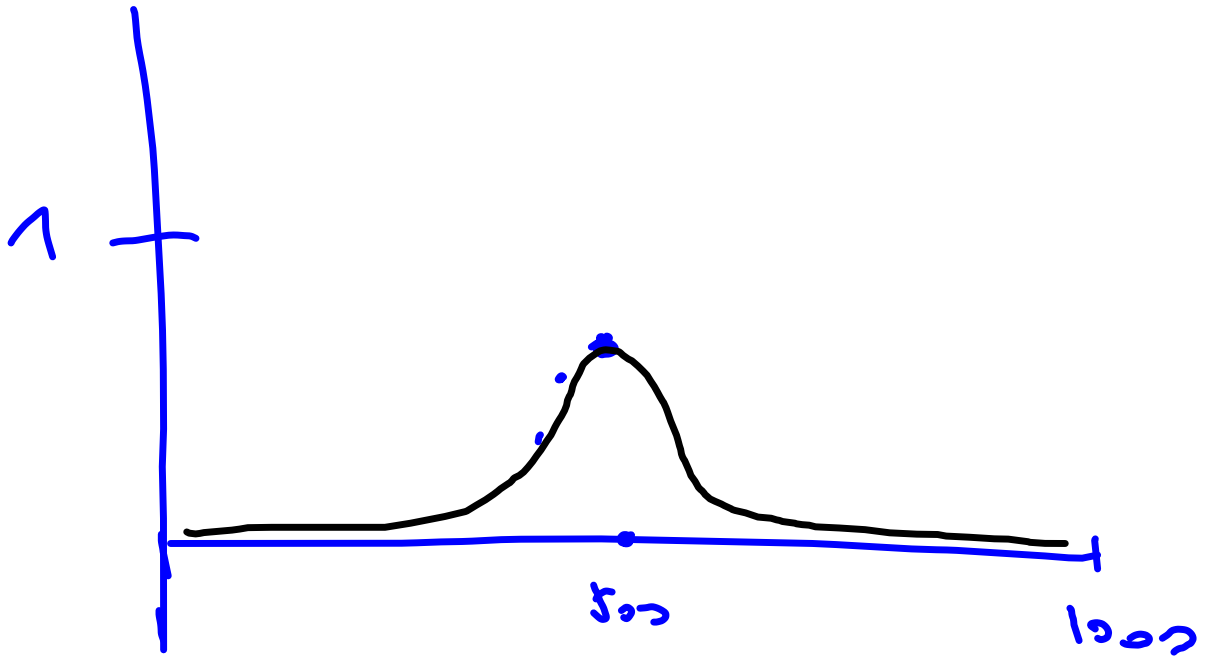
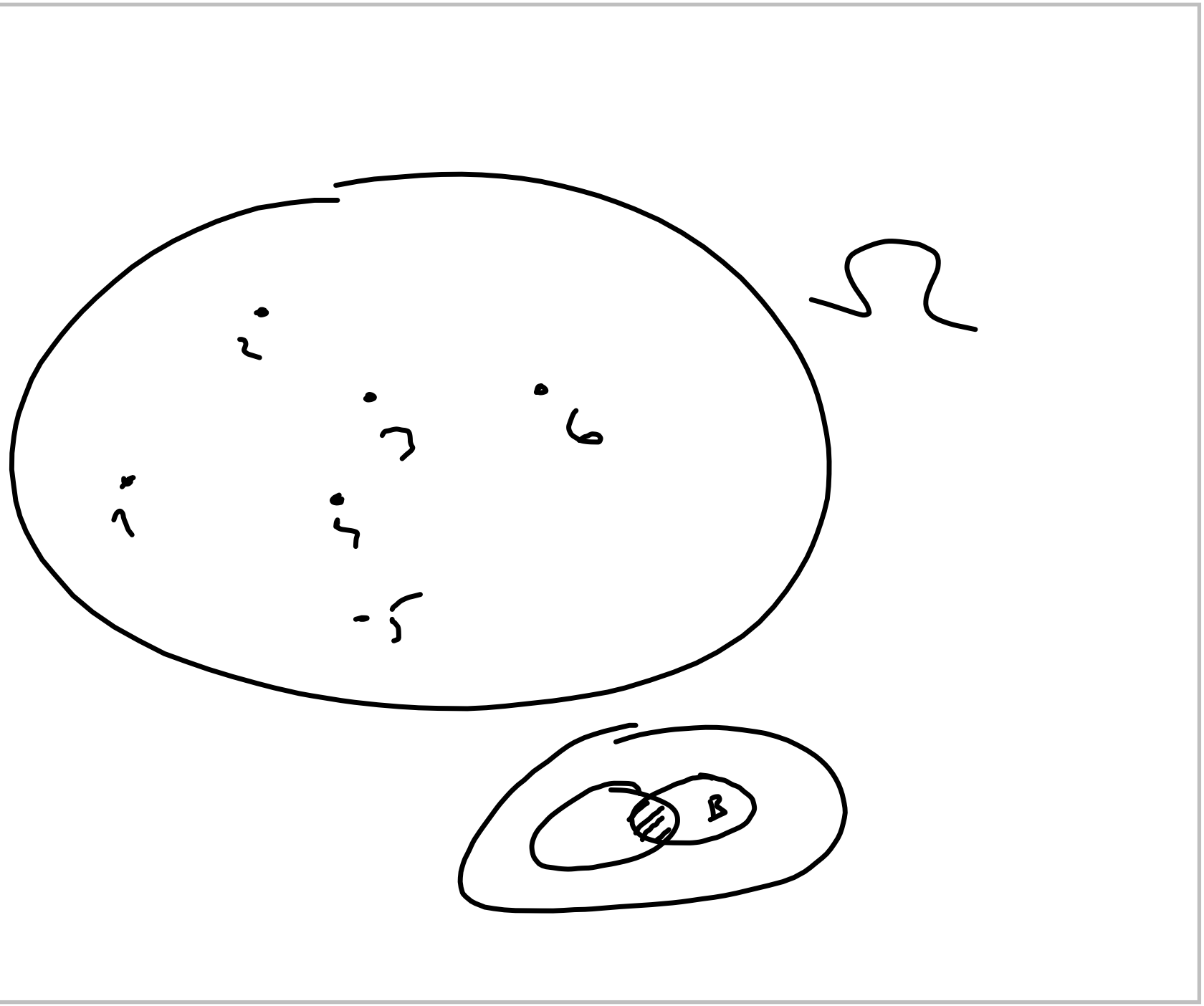



B

$$\mathcal{A} \subset 2^{\Omega}$$

$$\downarrow P$$

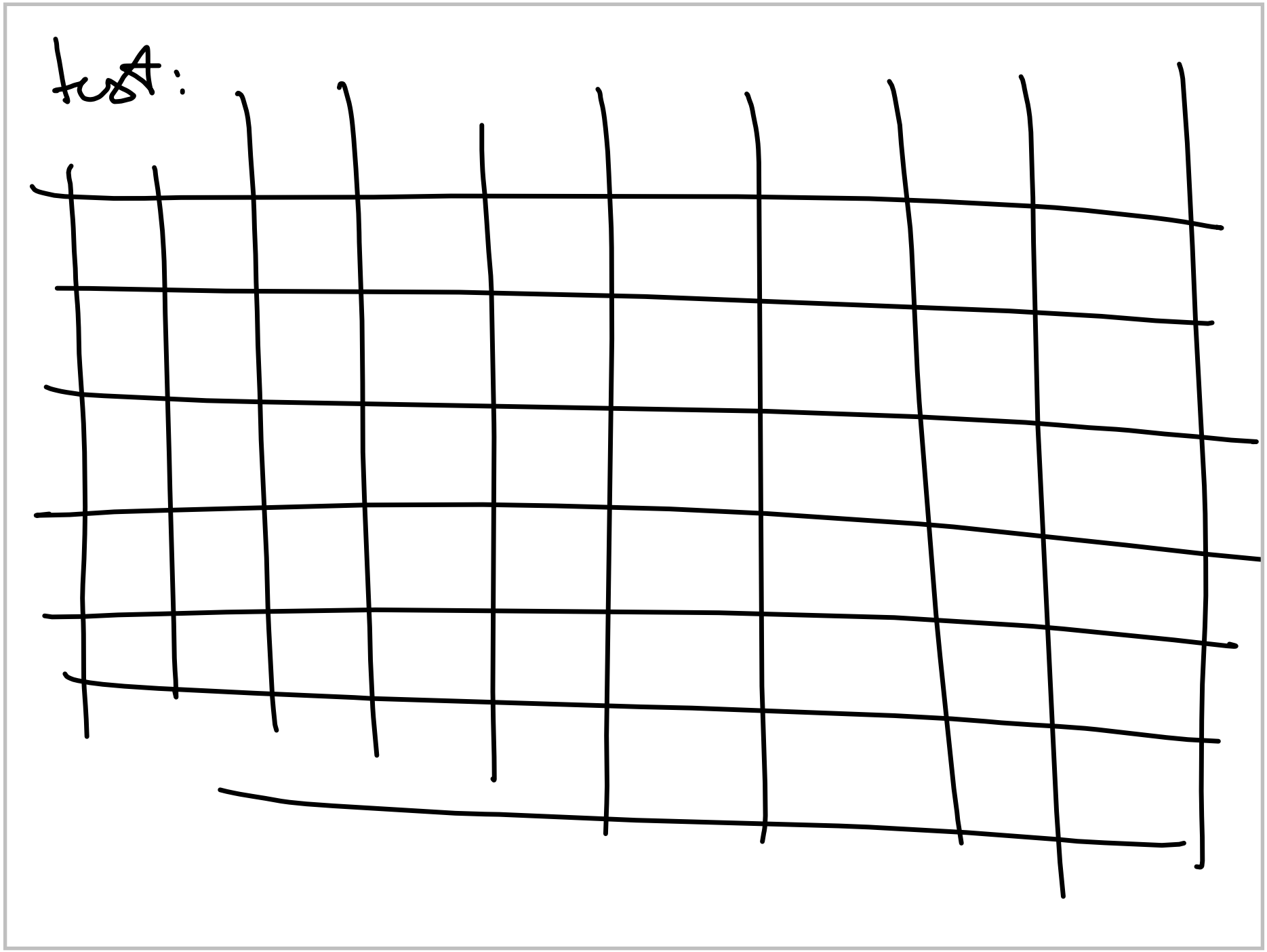
$$[0,1] \subset \mathbb{R}$$

Klasická P: $\quad |\Omega| = n \quad B \in \mathcal{A}$

$$\mathcal{A} = 2^{\Omega} \qquad P(B) = \frac{|B|}{|\Omega|}$$

$$\Omega = A^c \cup A \;, \quad A^c \cap A = \emptyset$$

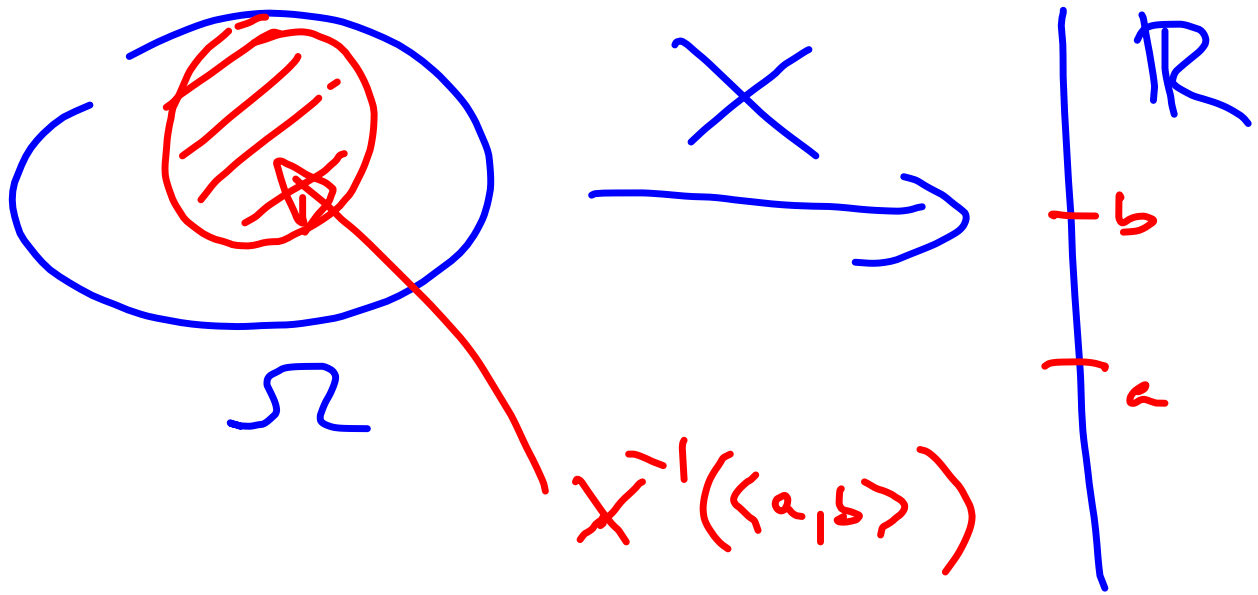
$$P(A^c) + P(A) = P(\Omega) = 1$$

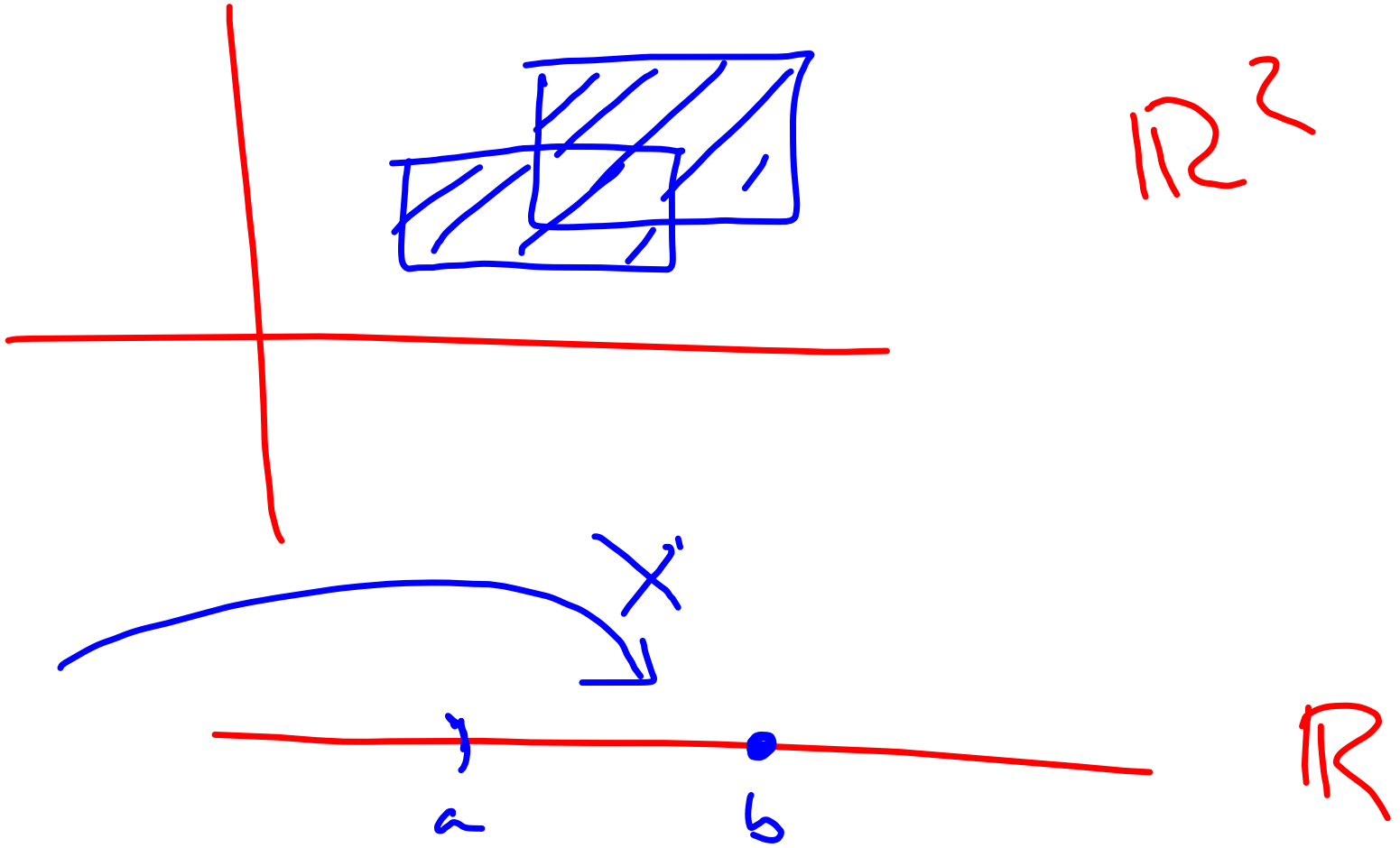

tuA:

$H = \{1,3,5\}$ (liché čísla)

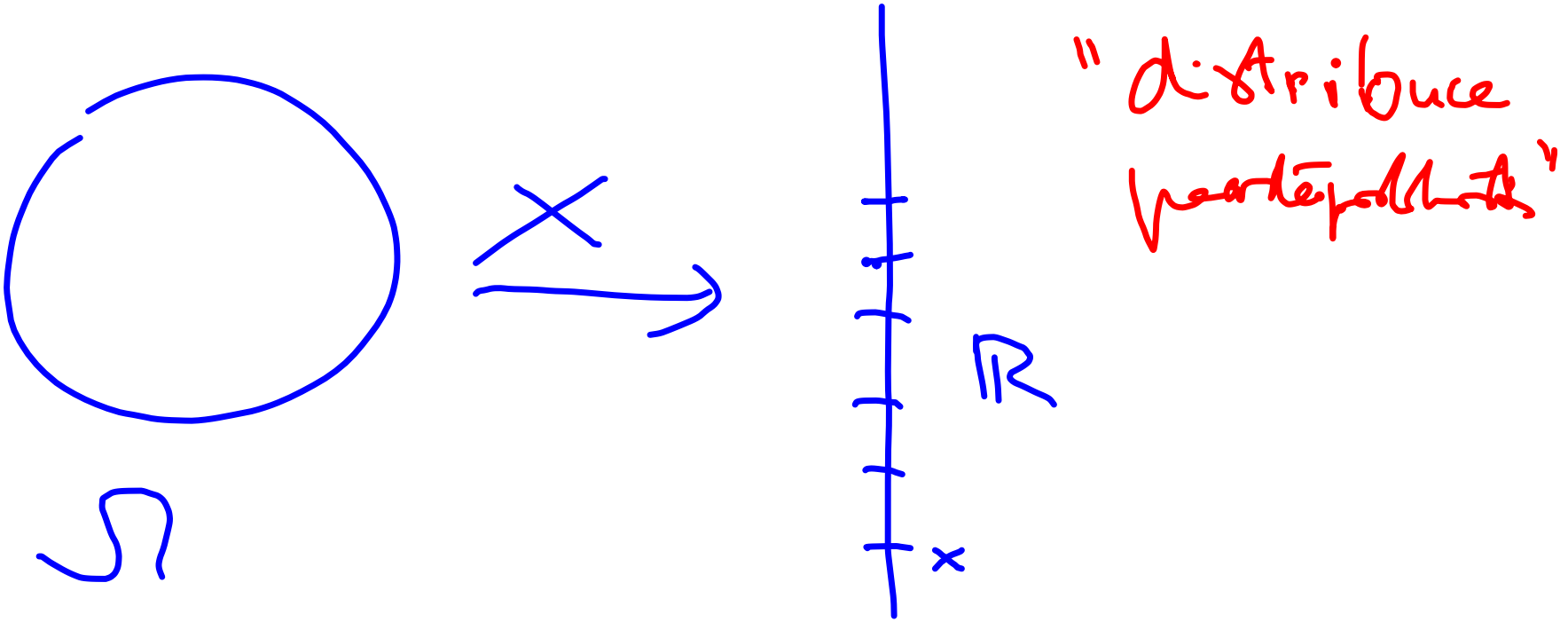
$A = \{3\}$

$$P(A|H) = \frac{P(A \cap H)}{P(H)} = \frac{\frac{1}{6}}{\frac{1}{2}} = \frac{1}{3}$$





$$P(X^{-1}((a,b))) = P(a < X \leq b)$$

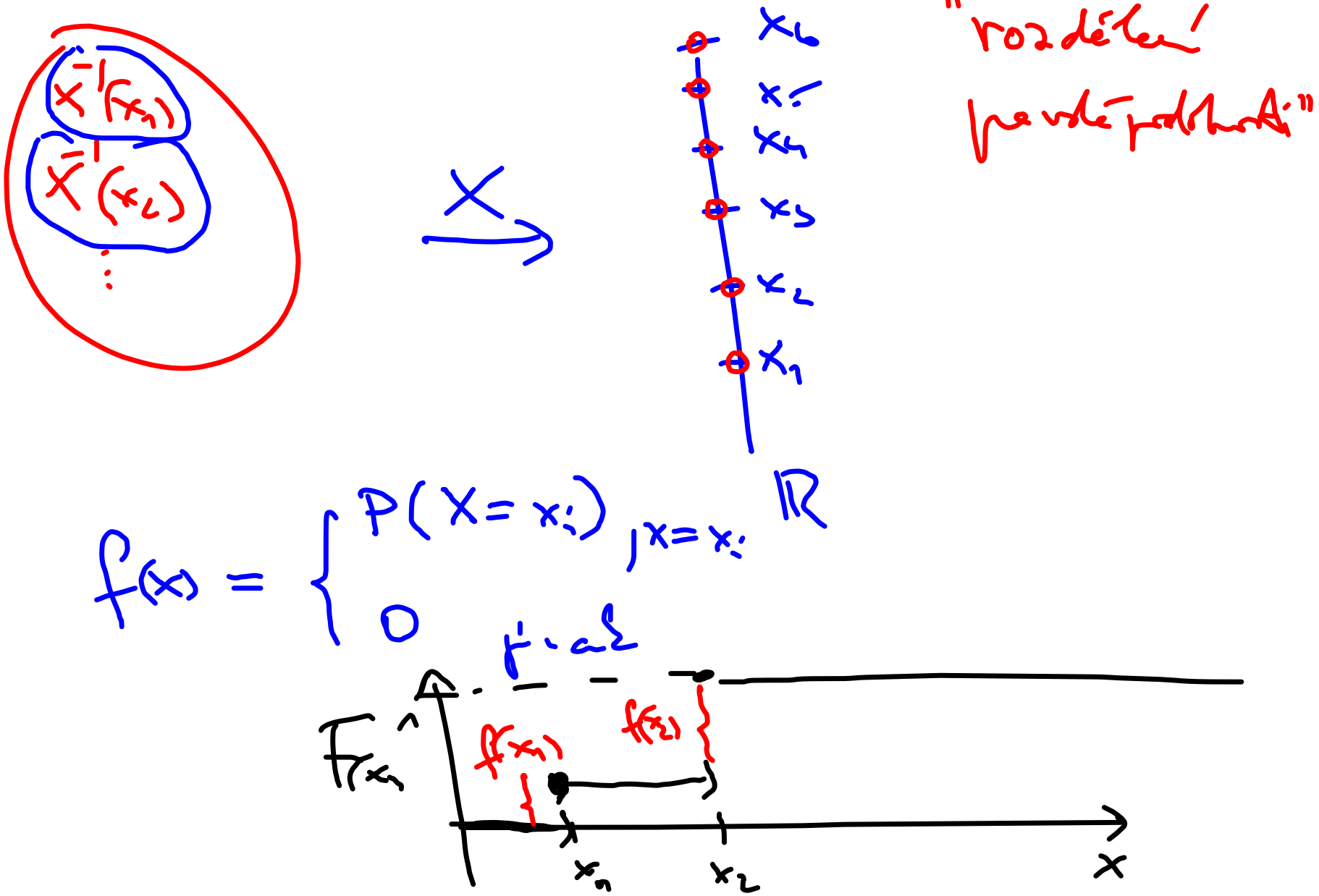


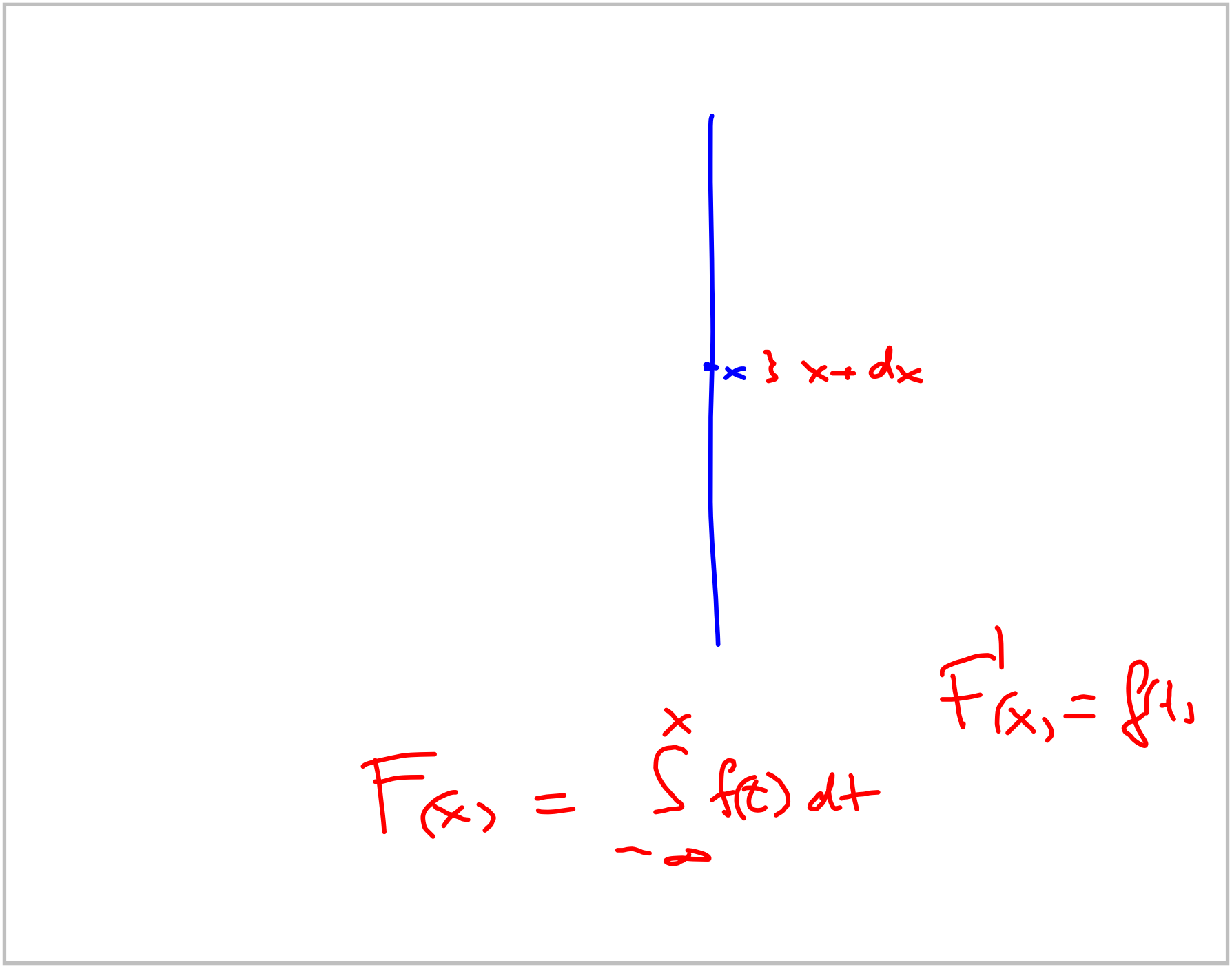
"distribuce pravděpodobnosti"

$A_x = P(X \leq x)$

$F(x) = P(A_x)$

$F: \mathbb{R} \to [0,1]$


$X^{-1}(x_n)$
$X^{-1}(x_2)$
X
x_6
x_5
x_4
x_3
x_2
x_1
"rozdělení pravděpodobností"
$\mathbb{R}$
$f(x) = \begin{cases} P(X=x_i) & x=x_i \\ 0 & \end{cases}$
f. cel
$F(x)$
$f(x_1)$
$f(x_2)$
x_1
x_2
x


x ; x + dx
F(x) = ∫ f(t) dt
F'(x) = f(x)