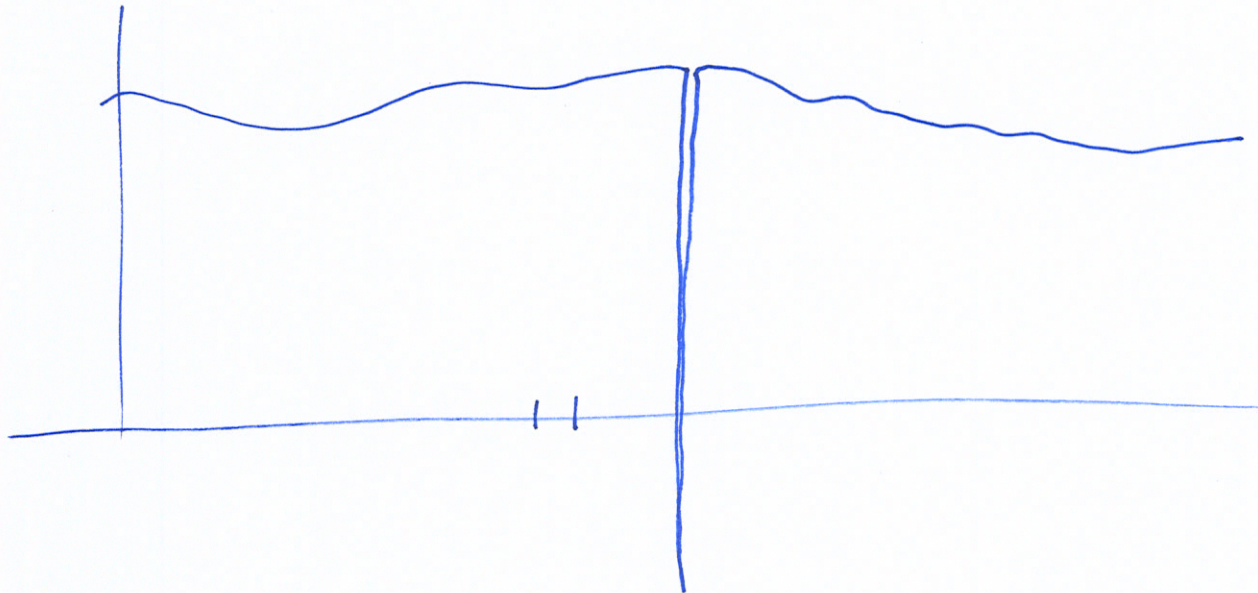
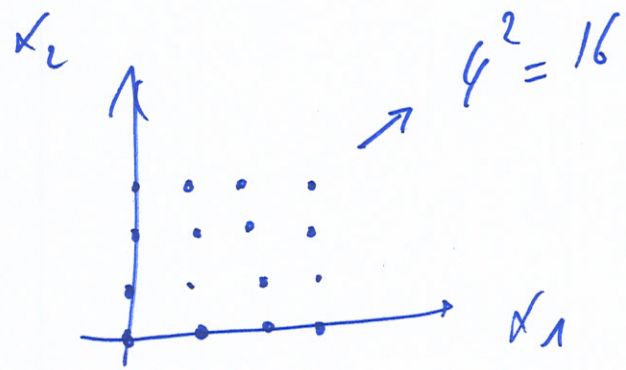


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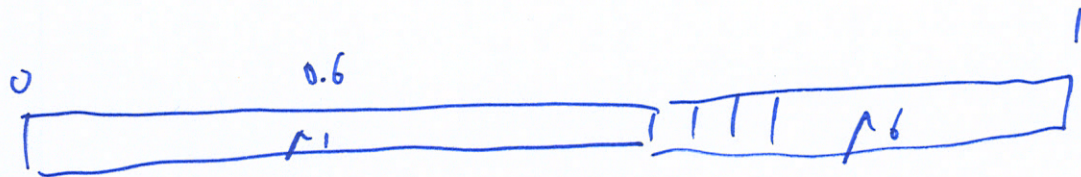
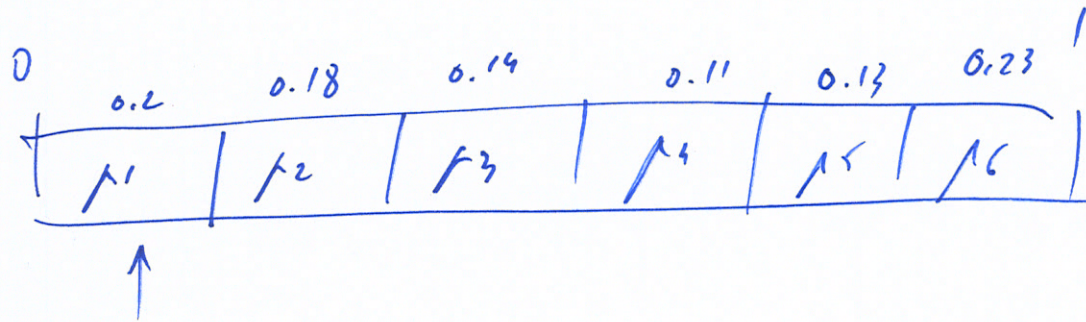
Binary string

0101
/ | | |
 2^3 2^2 2^1 2^0

$$\begin{aligned} &= 0 \cdot 2^3 + 1 \cdot 2^2 + 0 \cdot 2^1 + 1 \cdot 2^0 \\ &= 4 + 1 \\ &= 5 \end{aligned}$$

(2)

$$\begin{aligned} 6 &= 4 + 2 = 1 \cdot 2^2 + 1 \cdot 2^1 + 0 \cdot 2^0 \\ &\rightarrow 110 \end{aligned}$$



$$g(x) \leq 0$$

$$h(x) = 0$$

→ $x \in G$

$$x_1^2 + x_2^2 \leq 1$$



$$x_1^4 + x_1 x_2 + (x_1 x_2)^{x_3} + \frac{x_3^2}{x_1^4 + 1} \leq \pi$$

↓
 a fraction: penalty