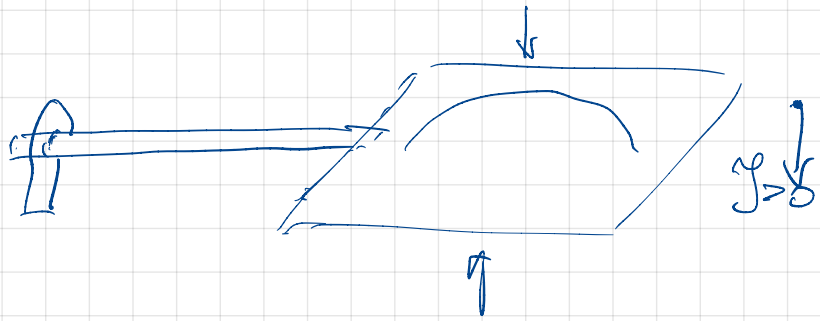
y Вт/м²



x: $T_в$, $\varphi_в$, $h_в$
$T_{атм}$, h_a, b_a

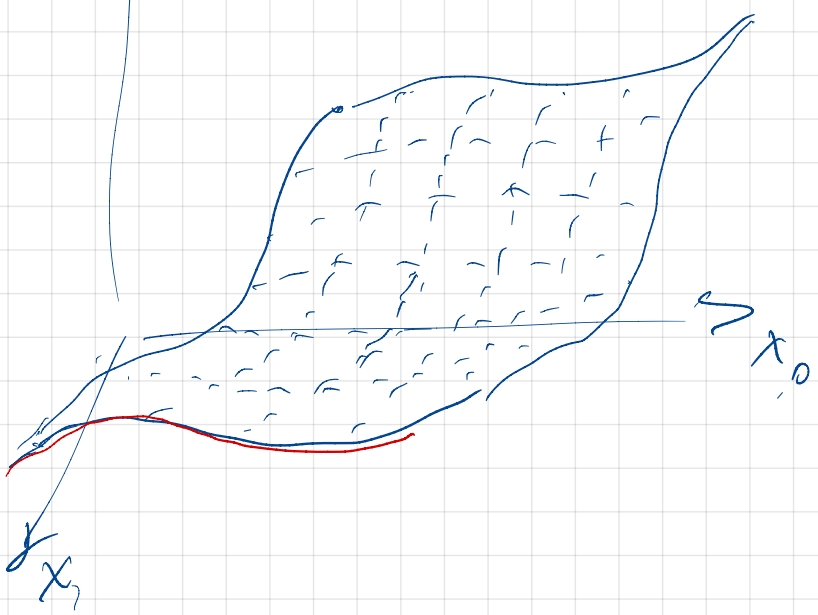
y

$x \in R^6$

$x' \in R^7 \times R^1$
$\theta^T \in R^7 \times R^1$

$y = \theta^T \tilde{x}$

$\tilde{x} = p^{(n)}(x)$
sin,
cos
exp
ln



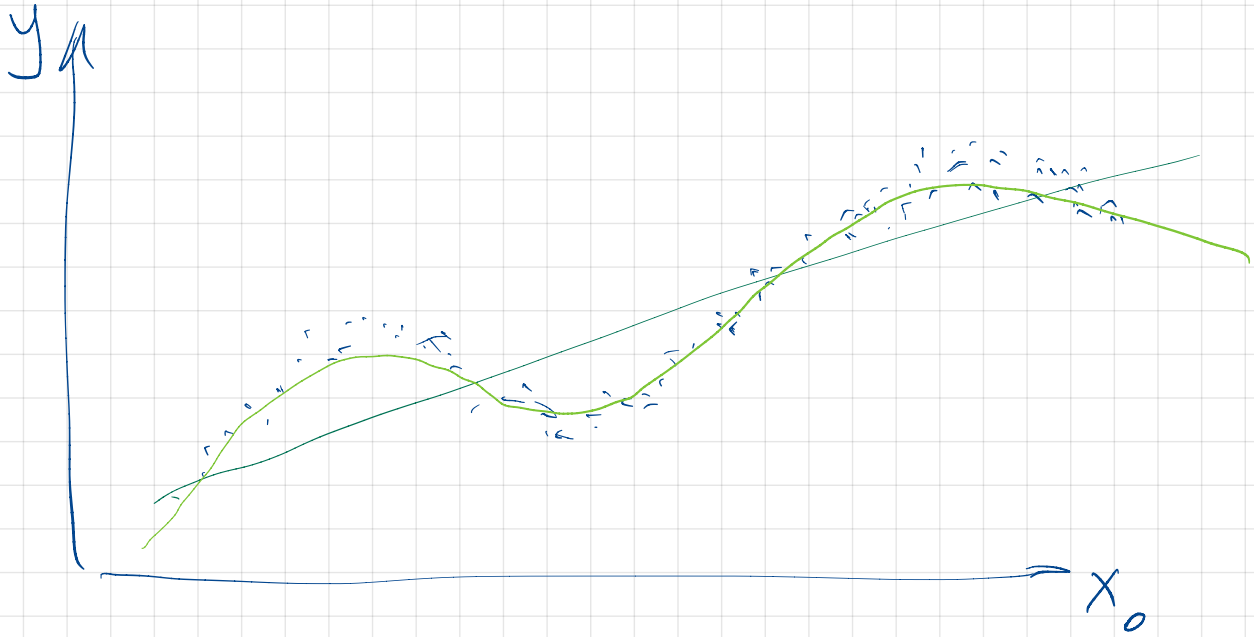
x_0, x_1, x_2 $\quad x \in R^3$

$\tilde{x} = p^{(2)}(x) = x_0^2; x_1^2; x_2^2; x_0x_1; x_0x_2; x_1x_2; 1;$ (2) (0)
x_0, x_1, x_2
(1)

$\tilde{x} = p^{(3)}(x) = 1, x_0, x_1, x_2,$ (0) (1) $x_0x_1, x_0x_2, x_1x_2,$ (2) $x_0^3, x_1^3, x_2^3,$ (3)
$x_0^2, x_1^2, x_2^2,$
$x_0x_1^2, x_0x_2^2, x_1x_2^2$
$x_0^2x_1, x_0^2x_2, x_1^2x_2$

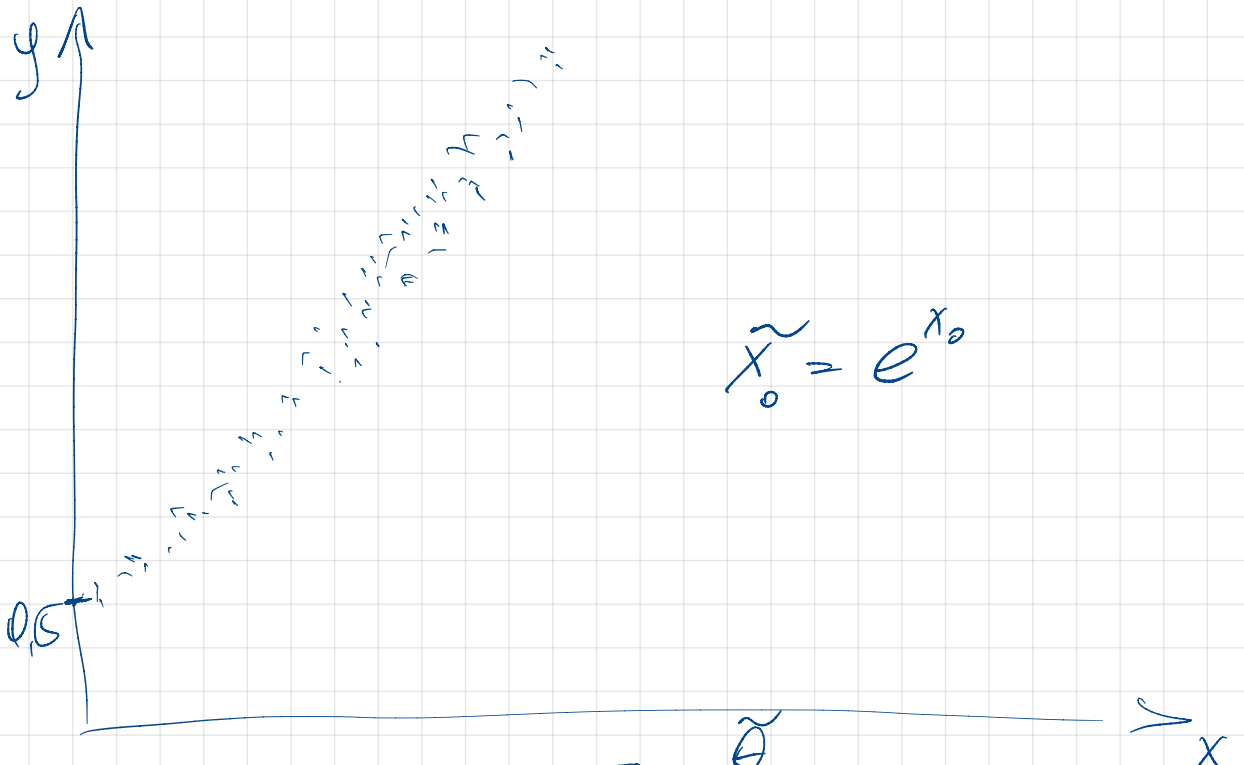
$y = \tilde{\theta}^T \tilde{x}$

$\tilde{x} \in R^{20}$
$\tilde{\theta}^T \in R^{20}$



$x_0^2, x_0^6 \dots x_0, 1$

$\tilde{y} = \theta^T \tilde{x}$



$\tilde{x}_0 = e^{x_0}$

$\tilde{\theta}$

$y = \theta^T \tilde{x}_0$

$\begin{bmatrix} 1 \\ \tilde{x}_0 \end{bmatrix}$ $\begin{bmatrix} \tilde{\theta}_0 \\ \tilde{\theta}_1 \end{bmatrix}$

Можно ли?

$y = p^{(6)}(x)$

$y = \theta^T \tilde{x}^{(6)}$

$h \sim \xi^{4/3}$

$\tilde{x} = \xi^{4/3}$

Feature engineering

Порождение признаков.