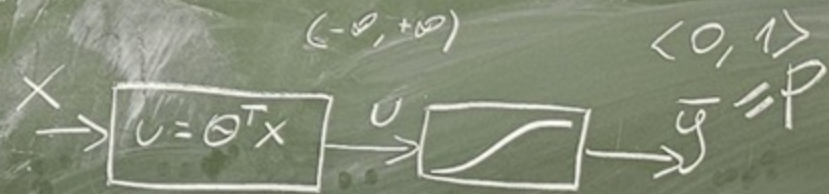


3. $\hat{m}$ = wynik



□ □ □

♡ ♡ ♡

$K^2 =$

$$\log_K \left(\frac{p}{1-p} \right) = u$$

$$K^u = \frac{p}{1-p}$$

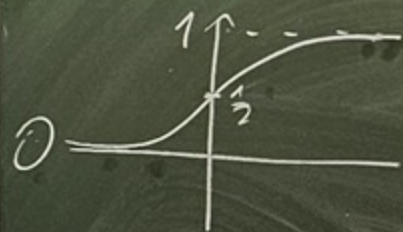
$$K^u - p K^u = p$$

$$K^u = p + p K^u$$

$$K^u = p(1 + K^u)$$

$$p = \frac{K^u}{1 + K^u}$$

$$p = \frac{1}{\frac{1}{K^u} + 1} = \frac{1}{1 + K^{-u}}$$



$$\Rightarrow \frac{1}{1 + e^{-u}}$$

$$\log_{10} 10 = 1$$

$$\ln e = 1$$

$$e^0 = 1$$

W domy

$$\frac{dp}{du} = g(p)$$

$$N(\mu_{5G}, \sigma_{5G})$$

$$N(\mu_{WiFi}, \sigma_{WiFi})$$

$$N(\mu_F, \sigma_F)$$

$$\mu_F = \frac{\mu_{5G} + \mu_{WiFi}}{2}$$

$$N(\mu_{5G}, \sigma_{5G}) \quad \cos^2 1 < \cos^2 2$$

$$N(\mu_{WiFi}, \sigma_{WiFi})$$

$5G \pm \cos^2 1$
 $WiFi \pm \cos^2 2$

$$N(\mu_F, \sigma_F) = N(\mu_{5G}, \sigma_{5G}) \cdot N(\mu_{WiFi}, \sigma_{WiFi})$$

$$\mu_F = \frac{\sigma_{WiFi}}{\sigma} \mu_{5G} + \frac{\sigma_{5G}}{\sigma} \mu_{WiFi}$$

$$\sigma_F$$

$$\pm 0.5$$

$$N(\mu_{WiFi}, \sigma_{WiFi})$$

$$\sigma = \sigma_{5G} + \sigma_{WiFi}$$

il. szans.

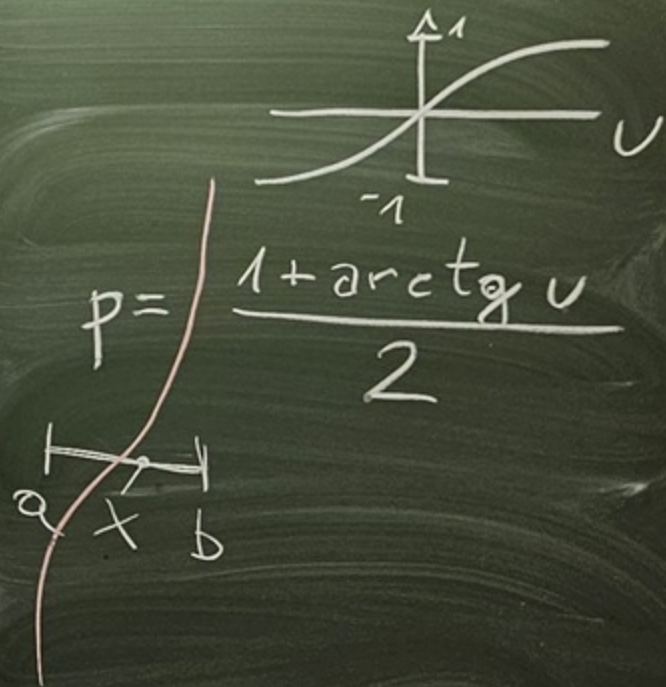
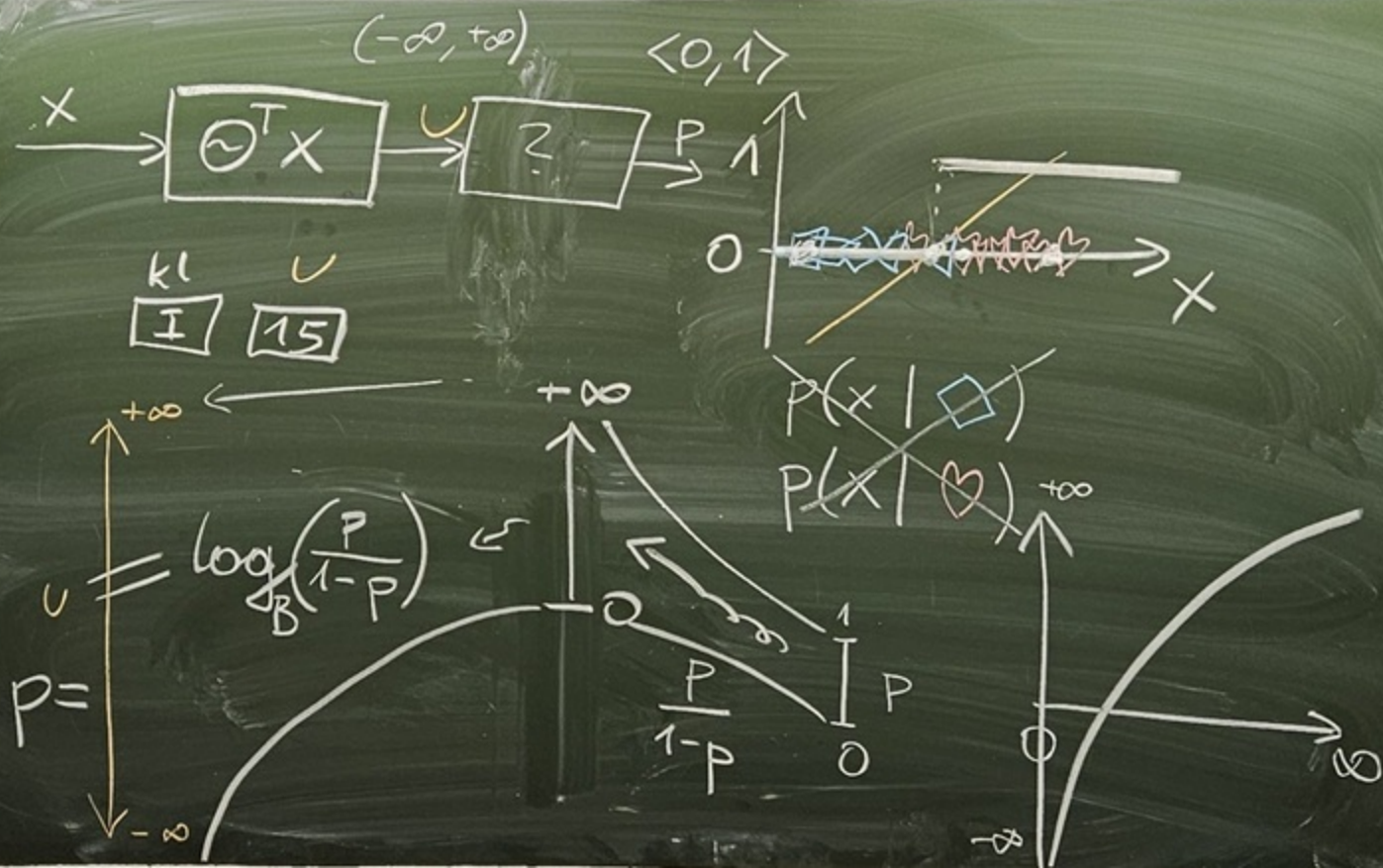
$$p = 0.8$$

$$\frac{p}{q} = \frac{p}{1-p} = \frac{0.8}{0.2} = \frac{4}{1}$$

$$\frac{p}{1-p} = \frac{5}{3} \quad 0.625$$



$$\frac{1}{|u|}$$



$(-\infty, +\infty)$ $(0, 1)$ 

$$p = \frac{B^u}{1 + B^u} = \frac{1}{1 + e^{-u}}$$

$$u \neq \log_B \left(\frac{p}{1-p} \right)$$

$$B^u = \frac{p}{1-p}$$

w domu

$$\frac{dp}{du} = \text{wzór}(p)$$

$$\frac{\frac{1}{2} + \arctan u}{\pi}$$

$$\lambda_2 = \frac{1}{2}$$

$$P = \begin{bmatrix} 1 & \frac{1}{2} \\ \frac{1}{2} & 1 \end{bmatrix}$$

$$\begin{bmatrix} \frac{1}{2} & \frac{1}{2} \\ \frac{1}{2} & \frac{1}{2} \end{bmatrix} \begin{bmatrix} v^{(1)} \\ v^{(2)} \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\frac{1}{2}v^{(1)} + \frac{1}{2}v^{(2)} = 0$$

$$v^{(2)} = -v^{(1)}$$

$$\begin{bmatrix} v^{(1)} \\ -v^{(1)} \end{bmatrix} = v^{(1)} \begin{bmatrix} 1 \\ -1 \end{bmatrix}$$



$$\begin{bmatrix} 3 & 0 \\ 0 & 1 \end{bmatrix}$$

$$\begin{bmatrix} -4 & 5 \\ 5 & 6 \end{bmatrix}$$

$$Av = \lambda v, \lambda \in \mathbb{R}, v \neq 0$$

$$Av - \lambda v = 0_s$$

$$(A - \lambda I)v = 0_s, A_{s \times s}$$

$$\det(A - \lambda I) = 0, (a - \lambda)(d - \lambda) - bc = 0$$

$$\det \begin{bmatrix} a & b \\ c & d \end{bmatrix} - \begin{bmatrix} \lambda & 0 \\ 0 & \lambda \end{bmatrix} = 0, \lambda^2 - \lambda(a + d) + ad - bc = 0$$

$$\det \begin{bmatrix} a - \lambda & b \\ c & d - \lambda \end{bmatrix} = 0, \lambda^2 - \lambda \cdot 2 + \frac{3}{4} = 0$$

$$np. \text{ lin. alg. eig } \begin{bmatrix} a - \lambda & b \\ c & d - \lambda \end{bmatrix} = 0, 4\lambda^2 - 8\lambda + 3 = 0$$

$$\Delta = 64 - 16 \cdot 3 = 64 - 48 = 16$$

$$\sqrt{\Delta} = 4$$

$$\lambda = \frac{8 \pm 4}{8}$$

$$\lambda_1 = \frac{3}{2}, \lambda_2 = \frac{1}{2}$$