Ćwiczenia 9-10

1. Strzałki:

$$f : \mathbb{R} \mapsto \mathbb{R}$$
$$g : \mathbb{Z} \to \mathbb{Z}$$
$$x \Leftarrow r$$

2. Środowisko `array`

$$\begin{array}{|l|cr|} \hline left1 & center1 & right1 \\ \hline d & e & f \\ \hline \end{array}$$

$$\begin{array}{lcl} z & = & a \\ & = & a \\ f(x,y,z) & = & x+y+z \end{array}$$

$$\chi(x) = \begin{vmatrix} x-a & -b & -c \\ -d & x-e & -f \\ -g & -h & x-i \end{vmatrix}$$

$$\left[\begin{array}{c|c|c|c} A & Ab & \cdots & A^{n-1}b \end{array}\right]$$

$$\left[\begin{array}{cccc|c} a_{11} & a_{12} & \cdots & a_{1n} & b_1 \\ a_{21} & a_{22} & \cdots & a_{2n} & b_2 \\ \vdots & & \ddots & \vdots & \\ a_{n1} & a_{n2} & \cdots & a_{nn} & b_n \end{array}\right]$$

$$C = \left[\begin{array}{c|c} A & B \\ \hline C & D \end{array}\right]$$

3. Poćwicz różne środowiska dedykowane dla macierzy https://www.overleaf.com/learn/latex/Matrices
4. Całki i granice

$$\lim_{n\to\infty} \left(1 - \frac{1}{a^n}\right) = 1$$

$$\lim_{n\to+\infty} \left(1 + \frac{1}{n}\right)^n = e$$

$$\int_a^b \sin(x)\,dx$$

$$\iint_D (x^2 + y - 4)\,dx\,dy$$

Wskazówka: przed indeskami do całki wstaw `\displaylimits`.