

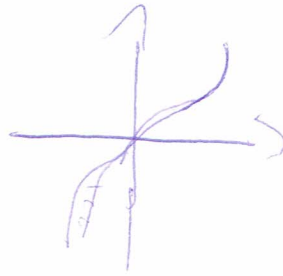
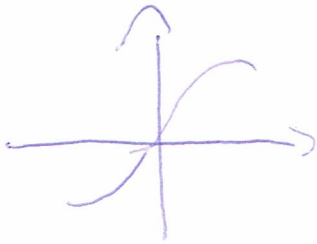
Am 12. W

Funktionselementare

arcsin  $\rightarrow$

$$\sin: \left[-\frac{\pi}{2}, \frac{\pi}{2}\right] \xrightarrow{1-1} [-1, 1]$$

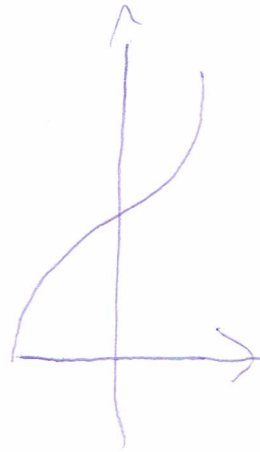
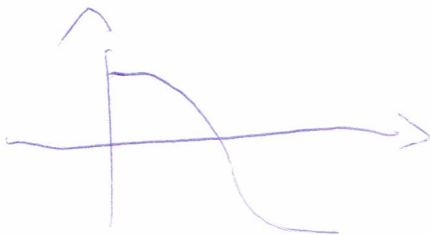
$$\arcsin: [-1, 1] \rightarrow \left[-\frac{\pi}{2}, \frac{\pi}{2}\right]$$



arccos  $\rightarrow$

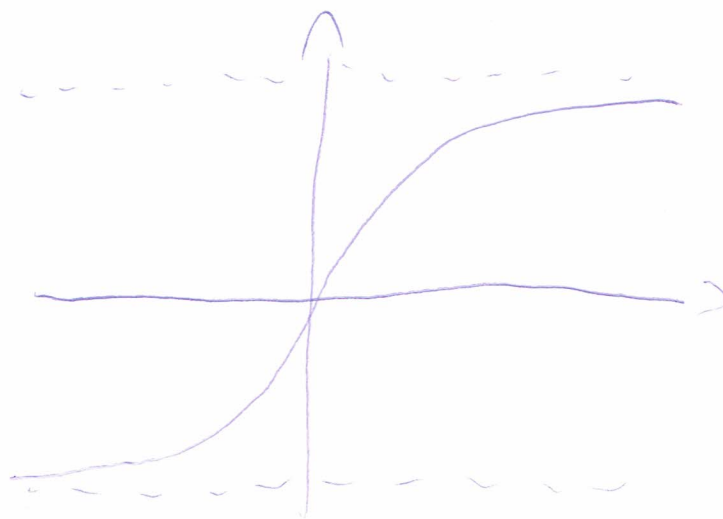
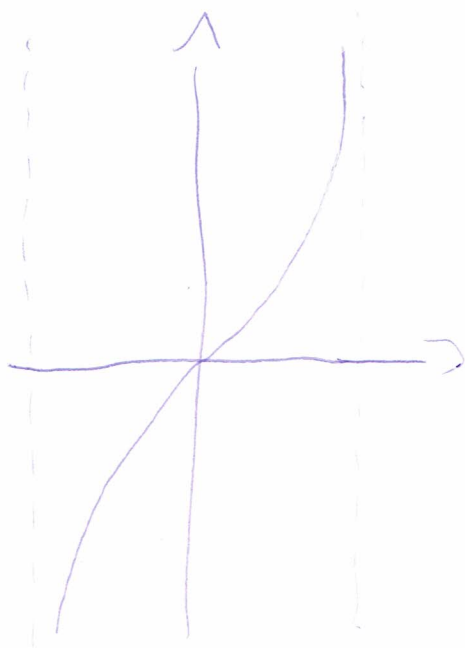
$$\cos [0, \pi] \xrightarrow{1-1} [-1, 1]$$

$$\arccos: [-1, 1] \rightarrow [0, \pi]$$



$$\arctg \rightarrow \text{tg} : \left(-\frac{\pi}{2}, \frac{\pi}{2}\right) \xrightarrow{1-1} \mathbb{R}$$

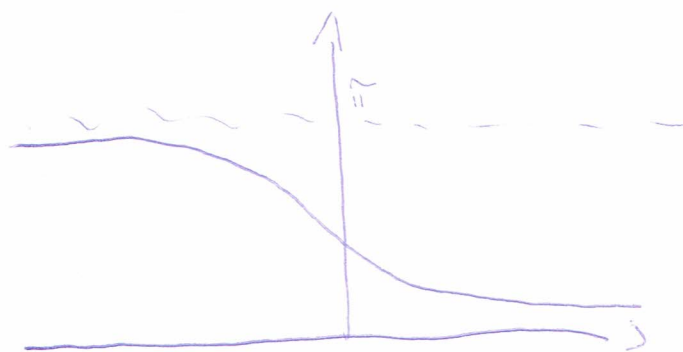
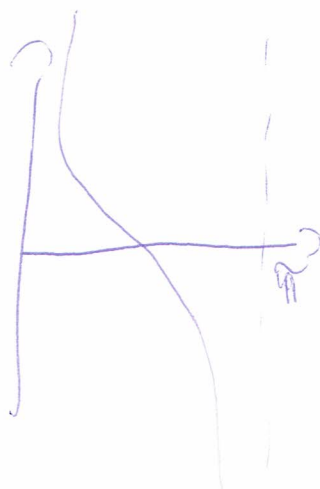
$$\arctg : \mathbb{R} \rightarrow \left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$$



$\arccos$

$$\cos : (0, \pi) \xrightarrow{1-1} \mathbb{R}$$

$$\arccos : \mathbb{R} \rightarrow (0, \pi)$$



$$\text{I } \arcsin x + \arccos x = \frac{\pi}{2}$$

$$\text{II } \arcsin \sqrt{1-x^2} = \begin{cases} \arccos x & x \geq 0 \\ \pi - \arccos x & x < 0 \end{cases}$$

Ćiagi

$$a: n \rightarrow 2n, n \in \mathbb{N}$$

$$a(n) = 2n, n \in \mathbb{N}$$

$$a_n = 2n, n \in \mathbb{N}$$

arithmetic:  $a_n = a_1 + (n-1)r$

$$a_{n+1} = \frac{a_n + a_{n+2}}{2}$$

$$S_n = \frac{a_1 + a_n}{2} \cdot n = \frac{2a_1 + (n-1)r}{2} \cdot n$$

geometric:  $a_n = a_1 \cdot q^{n-1}$

$$a_{n+1} = a_n \cdot q$$

$$S_n = \begin{cases} a_1 \frac{1-q^n}{1-q} & q \neq 1 \\ na_1 & \text{dla } q=1 \end{cases}$$

Granice

$$\forall \epsilon > 0, \exists N, \forall n > N, |a_n - g| < \epsilon$$

$$g - \epsilon < a_n < g + \epsilon$$

prawe wyzbroc alic a szereg <sup>a pota</sup> liczbowy nieskonczony  
Cialo  $\rightarrow$  pota

1.

1. dzień do pracy stajemy

2. dzień do niechodzenia

3. nie widać pracy