oblicz i całkę 2:

$$I = \int_{-2}^{3} \frac{1}{1 + e^{-0.25x}} \, dx$$

---

werty tk

1 0.1	t_k	A_k
	± 0.577350	1

$t_0 = -0.577 \quad t_1 = 0.577 \quad A_0 = 1 \quad | \quad A_1 = 1 \quad n=1$

$$I(f) = \int_a^b f(x)dx = \frac{b-a}{2}\left(A_0 f\left(\frac{b-a}{2} t_0 + \frac{b+a}{2}\right) + A_1 f\left(\frac{b-a}{2} t_1 + \frac{b+a}{2}\right) \right)$$

$x_0 = \frac{b-a}{2} t_0 + \frac{b+a}{2} = \cancel{1.943375}$

$\qquad b-a = 5 \quad \frac{b-a}{2} = 2.5$

$\qquad b+a = 1 \quad \frac{b+a}{2} = 0.5$

$x_0 = -0.943375$

$x_1 = 1.943375$

$f(x_0) = 0.441310846 = A_0 f(x_0)$

$f(x_1) = 0.619126838\Gamma = A_1 (f(x_1))$

$\cancel{A_0 f(x_0)} = A_0 f(x_0) + A_1 f(x_1) = 1.060437685 \cdot \frac{b-a}{2} =$

$$= 2.651094211$$

$n = 2$ $\begin{matrix} k \\ 0,2 \\ 1 \end{matrix}$ $\begin{matrix} TL \\ t_k \neq 0.774597 \\ 0 \end{matrix}$ $\begin{matrix} A_k \\ 5/9 \\ 8/9 \end{matrix}$ ②

$t_0 = -0,774597$ $\vdots$ $x \frac{b-a}{2} = -1,9364925$ $\vdots$ $t\left(\frac{b+a}{2}\right) = -1,4364925$

$t_1 = 0$ $\vdots$ $x \frac{b-a}{2} = 0$ $\vdots$ $= 0,5$

$t_2 = 0,774597$ $\vdots$ $x \frac{b-a}{2} = 1,9364925$ $\vdots$ $= 1,9364925$

$\frac{b-a}{2} = 2,5$ $\frac{b+a}{2} = 0,5$

$f(t_0) = 0,411718492$

$f(t_1) = 0,531209373u$

$f(t_2) = 0,618721016q$

$\overline{A_0 = A_2 = 5/9 \quad A_1 = 8/9}$

$A_0 f(t_0) = 0,2284288051$

$A_1 f(t_1) = 0,472188610u7$

$A_2 f(t_2) = 0,3437338983$

$\overline{\qquad = 1,044348813} \cdot \left(\frac{b-a}{2} = 2.5\right) =$

$(2) \quad = 2,610872033$

Werty	Stopień	I
1 Werty Legendrea	1(2)	2,6510944211
— " —	2(3)	2,6108972033
— " —	3(4)	2,6511760075
— " —	4(5)	2,6511774458

Met. Parabol (2) ⟶ 4.5054

(20) ⟶ 2.8227

(200) ⟶ 2.6682

(1000) ⟶ 2.6545726620

Metoda Trapezów

$$\frac{h}{2}\left(f(x_0) + f(x_1)\right) = \frac{h}{2}f(a) + \frac{h}{2}f(b)$$

$f(a) \cdot \frac{h}{2}$

$f(b) \cdot \frac{h}{2}$

$\frac{h}{2} \quad \frac{h}{2}$

$a \qquad b$
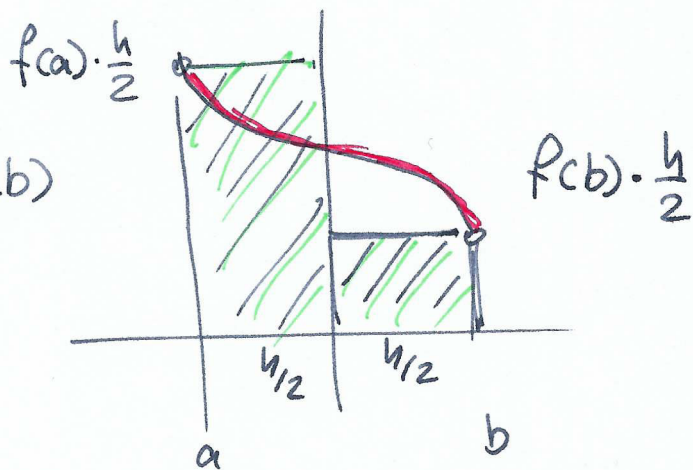
Metoda Parabol.

$$\frac{h}{3} \cdot \left(f(a) + 4f(c) + f(b)\right)$$

$f(x_0) = f(a)$

$f(x_1) = f(c)$

$f(x_2) = f(b)$

$\frac{h}{3} \quad \frac{h}{3} \quad \frac{h}{3} \quad \frac{h}{3} \quad \frac{h}{3} \quad \frac{h}{3}$

$4 \cdot \frac{h}{3}$

$2h$

$4\frac{h}{3} \quad 2\frac{h}{3} \quad 4\frac{h}{3}$

$1 \cdot \frac{h}{3} \qquad 4 \cdot \frac{h}{3} \qquad 2 \cdot \frac{h}{3}$