

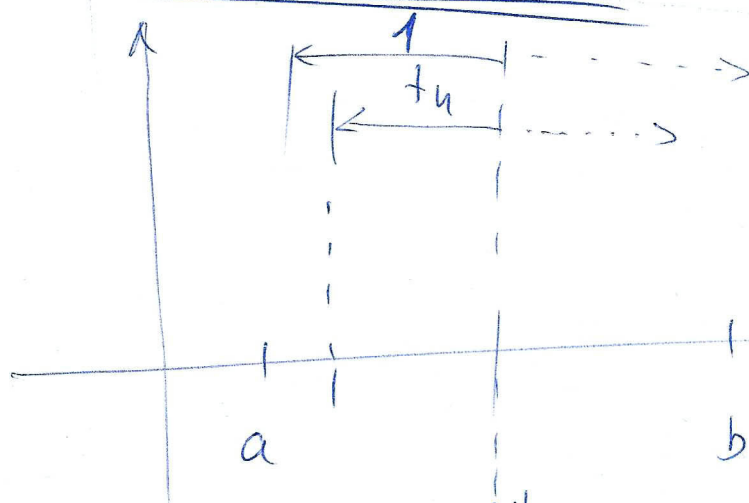
2cd 11

(1)

$$\text{dla } I = \int_{-2}^3 \frac{1}{1+e^{-1/4x}} dx$$

n	k	t_k	A_k
1	0,1	$\pm 0,577350$	1
2	0,2	$\pm 0,774597$	5/9
	1	0	8/9
3	0,3	$\pm 0,861136$	0,347855
	1,2	$\pm 0,339981$	0,652145
4	0,4	$\pm 0,906180$	0,236927
	1,3	$\pm 0,538469$	0,478629
	2	0	0,568889

$$x_n = \frac{b-a}{2} t_n + \frac{b+a}{2}$$



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

Werty

1 -

$$a = -2 \quad b = 3$$

$$\frac{a+b}{2} = \frac{1}{2} = 0,5 \quad (2)$$

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

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

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

⊕		⊖	
1	0	1	1,943375
	6	2	2,4364925
2	1		
	0	3	2,65284
3	1	2	1,3499525
	0	3	2,76545
4	1	2	1,8461725
	2		
			0,5

$$1: I(f) = \frac{b-a}{2} (1 \cdot f(-0.94) + 1 \cdot f(1.9433)) =$$

(3)

$$2.5 (1.2660 + 0.6152) = 4.7029 //$$

$$2: I(f) = 2.5 \left(\frac{5}{9} \cdot f(-1.436) + \frac{8}{9} (f(0)) + \frac{5}{9} \cdot f(2.4364) \right) \\ = 4.7055 //$$

$$3: I(f) = 2.5 \left(0.347 \cdot f(-1.67) + 0.65 \cdot f(\underset{-0.34}{1.34}) + 0.61 \cdot f(1.34) \right. \\ \left. + 0.347 \cdot f(2.65) \right) = 4.70542679 //$$

$$4: I(f) = 2.5 \left(0.23 \cdot f(-1.76) + 0.47 \cdot f(-0.84) + 0.56 \cdot f(0.5) \right. \\ \left. + 0.47 \cdot f(1.8) + 0.23 \cdot f(2.76) \right) \\ = 4.705421164458120$$