$$\int \frac{1}{\cos^3 t}\,dt = \left|\begin{array}{l} u = \sin t \\ du = \cos t\,dt \end{array}\right| =$$

$$= \int \frac{1}{\cos^3 t} \cdot \frac{1}{\cos t}\,du = \cancel{\int \frac{1}{\cos^3 t}\,du} =$$

$$= \cancel{\int \frac{1}{(1-\sin^2 t)^2}\,du} = \int \frac{1}{(1-u^2)^2}\,du$$

$$\frac{1}{\sqrt[4]{1+x^4}} \longrightarrow \frac{1}{\sqrt[4]{1+\frac{1}{t^4-1}}} =$$

$$\left(x^4 = \frac{1}{t^4-1}\right) = \left(\frac{t^4-1+1}{t^4-1}\right)^{-\frac{1}{4}} =$$

$$= \left(\frac{t^4}{t^4-1}\right)^{-\frac{1}{4}} = \left(\frac{t}{\sqrt[4]{t^4-1}}\right)^{-1}$$

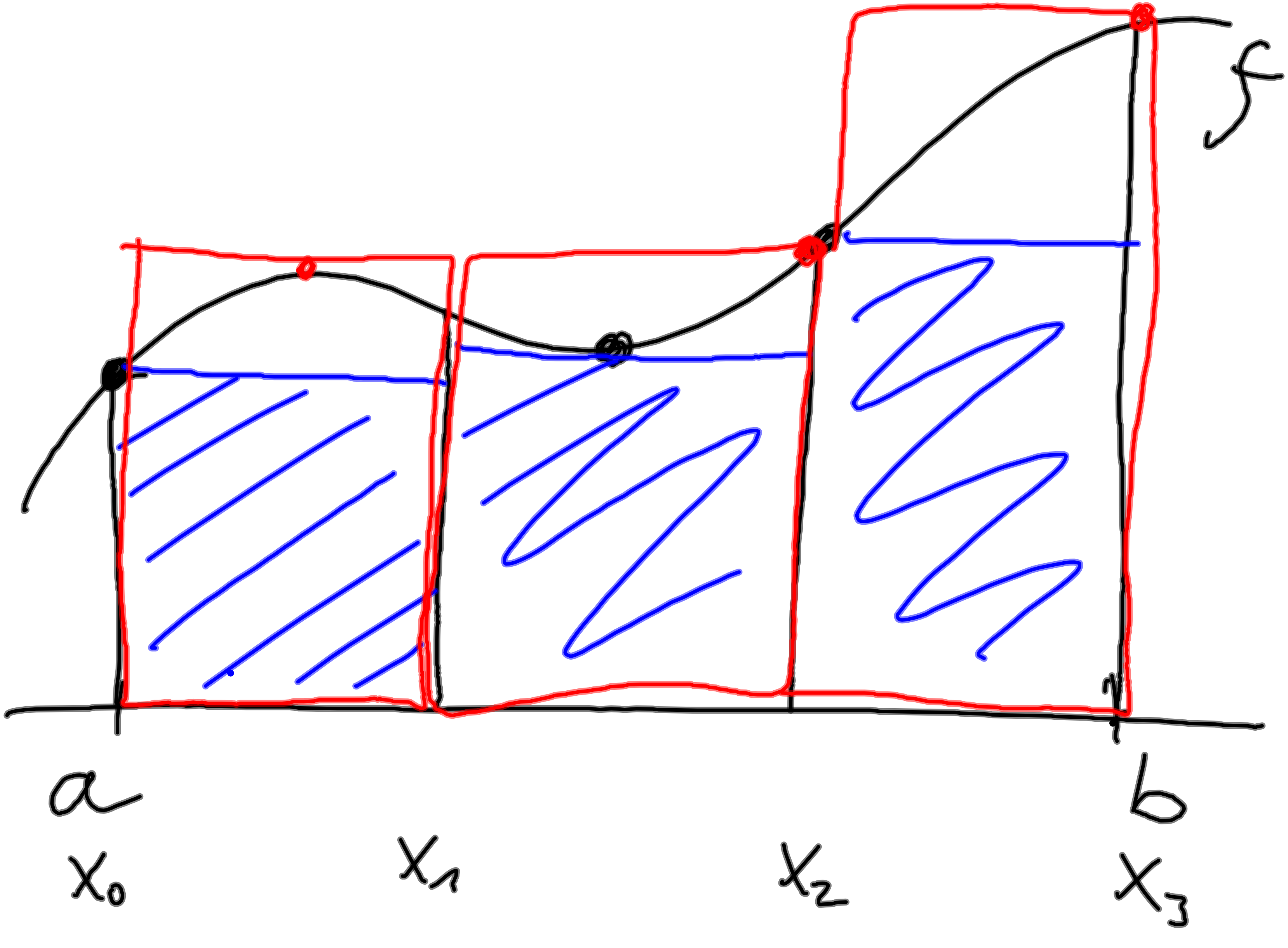
$$\int \frac{\ln x}{x}\,dx = \left| \begin{matrix} t = \ln x \\ dt = \frac{1}{x}\,dx \end{matrix} \right| =$$

$$= \int t\,dt = \frac{t^2}{2} + c = \frac{\ln^2 x}{2} + c =$$

$$\left(= \ln^2 \sqrt{x} + c \ldots \right)$$

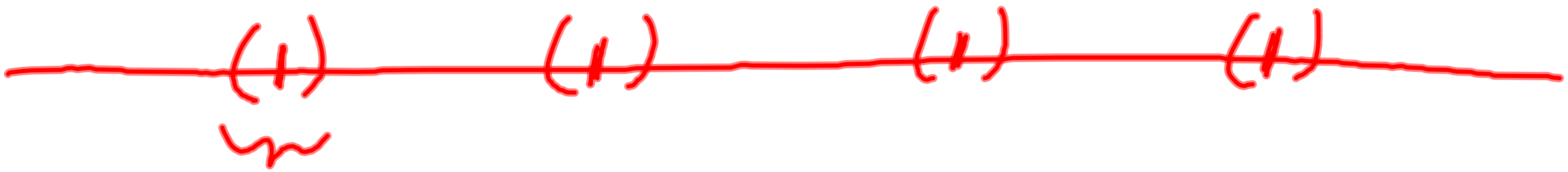
$$\int \frac{x}{\ln x}\,dx = \left| \begin{matrix} t = \ln x \\ dt = \frac{1}{x}\,dx \end{matrix} \right| =$$

$$\left\{ = \int \frac{x^2}{t}\,dt = \ldots \right\}$$



f
a
b
x_0
x_1
x_2
x_3

ε .. LIB. PEVNÉ



$$\underset{\displaystyle\frac{\varepsilon}{10}}{\underset{\parallel}{d(I_i)}} < \frac{\varepsilon}{4}$$

10 + HR.B.

$$\frac{\varepsilon}{10^{\cdot\cdot}} \cdot \infty = 0 \cdot \infty$$

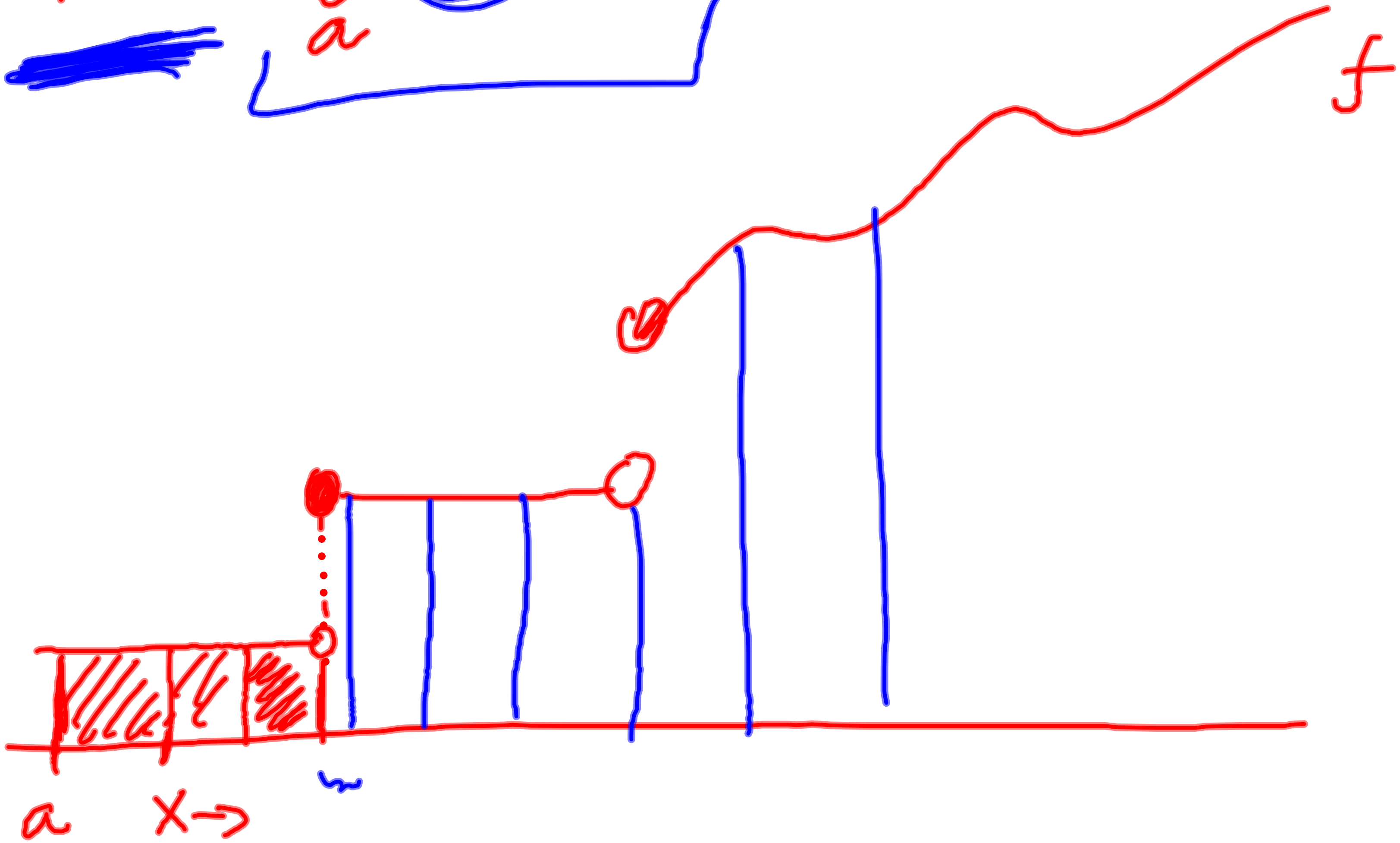
$$Q(x) = \frac{2x^{14} + 5x^{13} + 3x^{12} - 10x^{11} - 22x^{10} + 11x^{9} + 116x^{8} + 298x^{7} + 504x^{6} + 975x^{5} + 1440x^{4} + 2220x^{3} + 1744x^{2} + 1280x + 128}{(x+1)\cdot(x-2)^2\cdot(x^2+2x+2)\cdot(x^2-x+1)\cdot(x^2+x+2)^3}$$

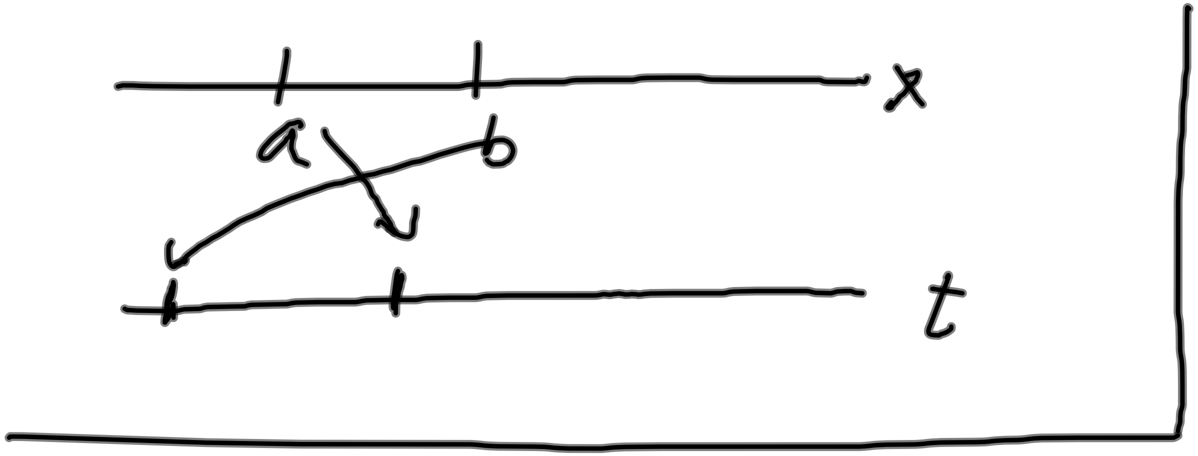
$$Q(x) = 2x+3 + \frac{-4}{x+1} + \frac{5}{(x-2)^2} - \frac{7}{x^2+2x+2}$$

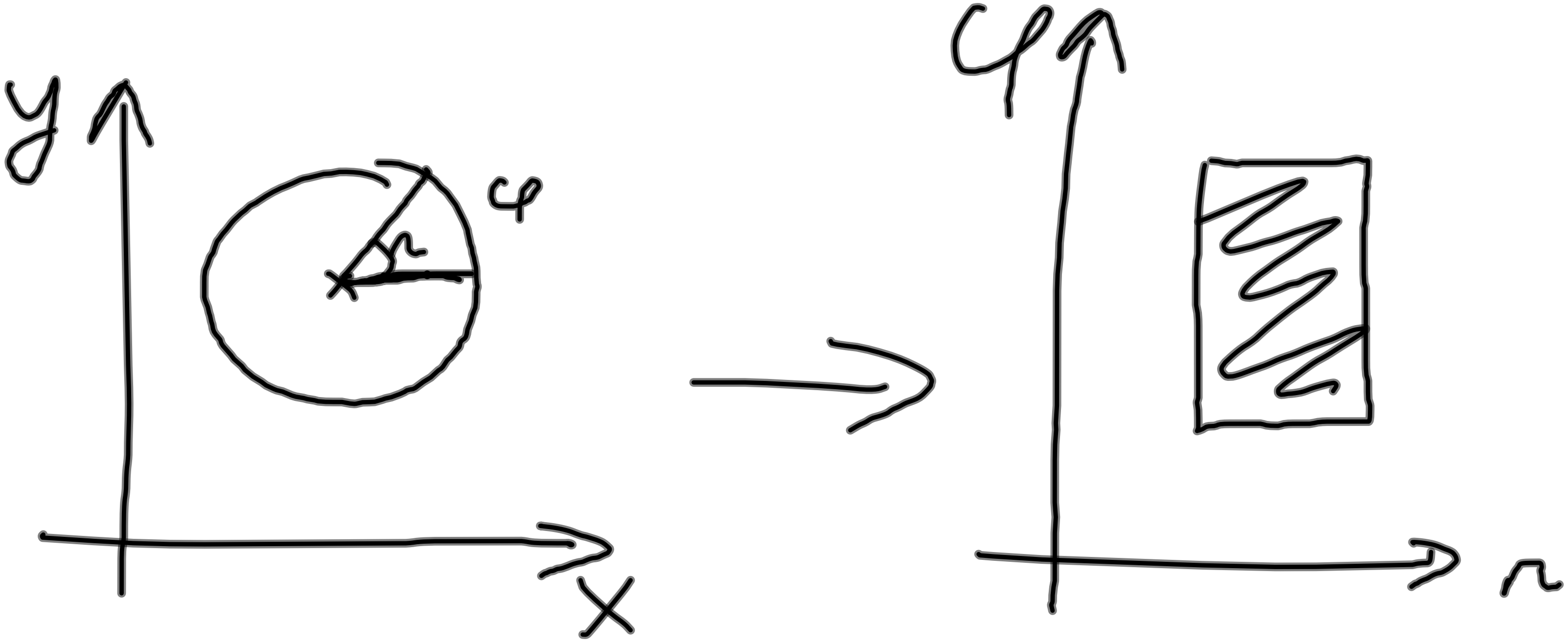
$$+ \frac{2x+5}{x^2-x+1} + \frac{2-3x}{(x^2+x+2)^3}$$

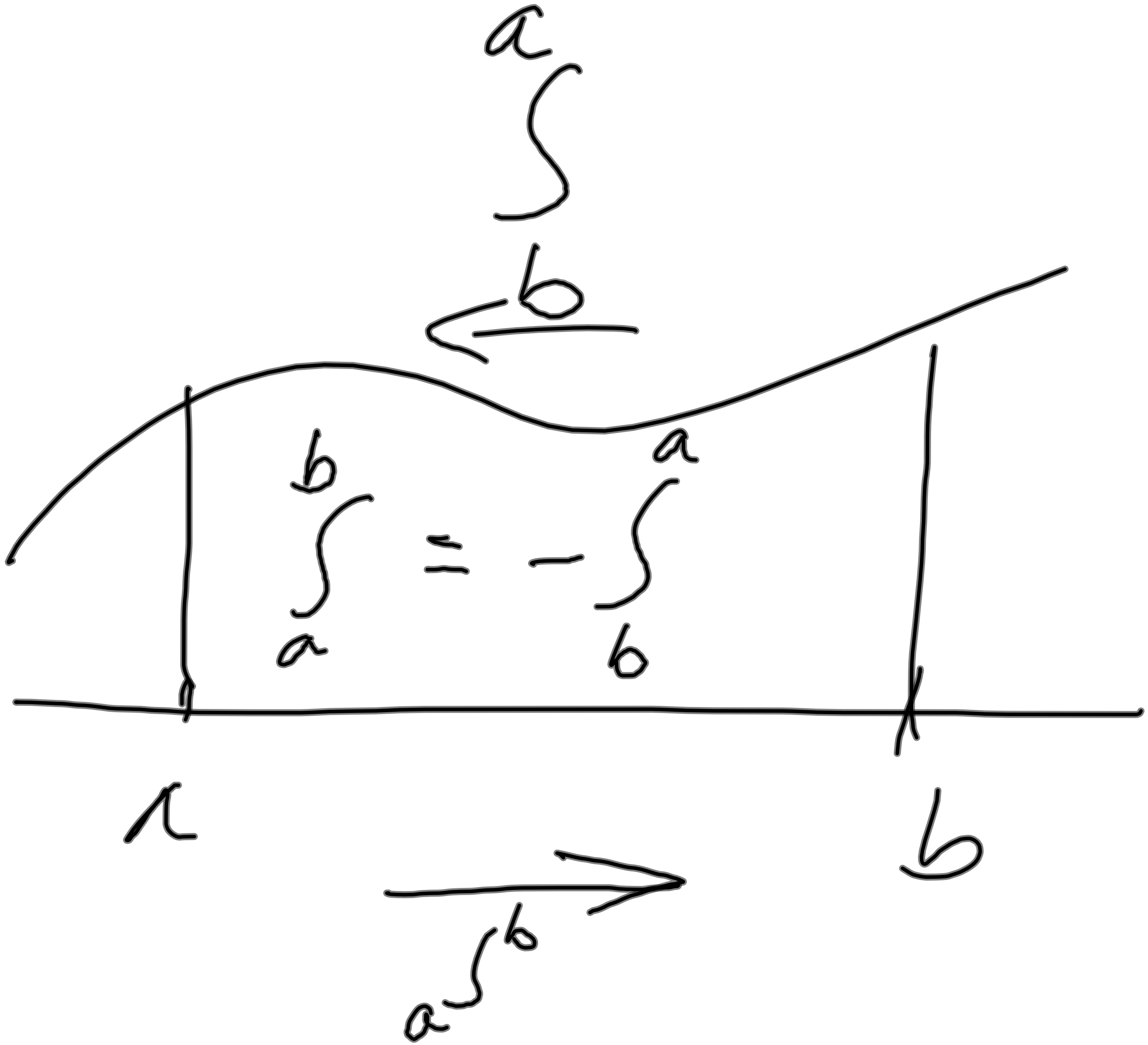
$$\boxed{\int Q(x)\,dx = ?}$$

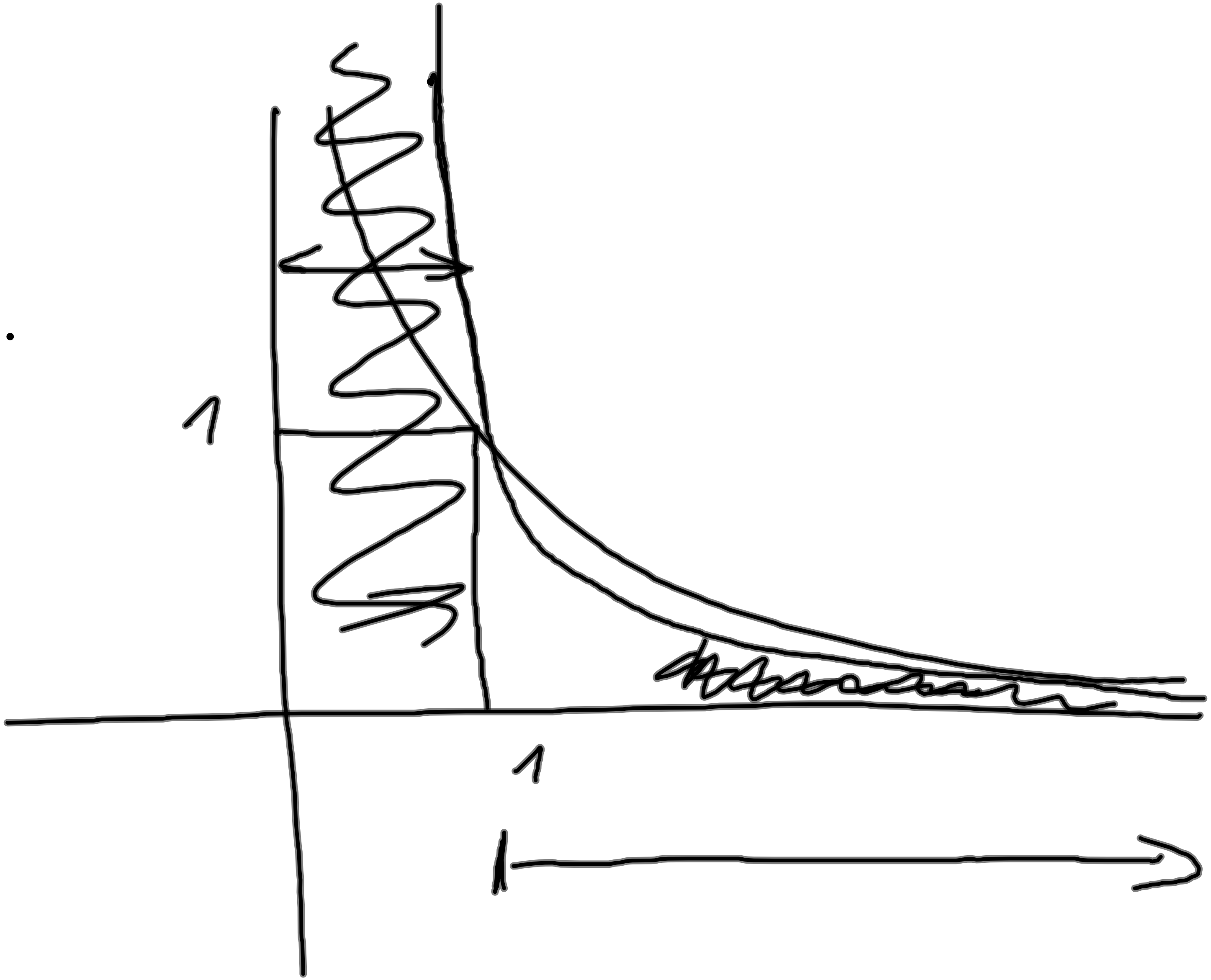
$$F(x) = \int_a^x f(t)\,dt$$




x
a
b
t


y
φ
r
x
φ
r


$\int_b^a$
$\int_a^b = -\int_b^a$
a
b
$\int_a^b$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