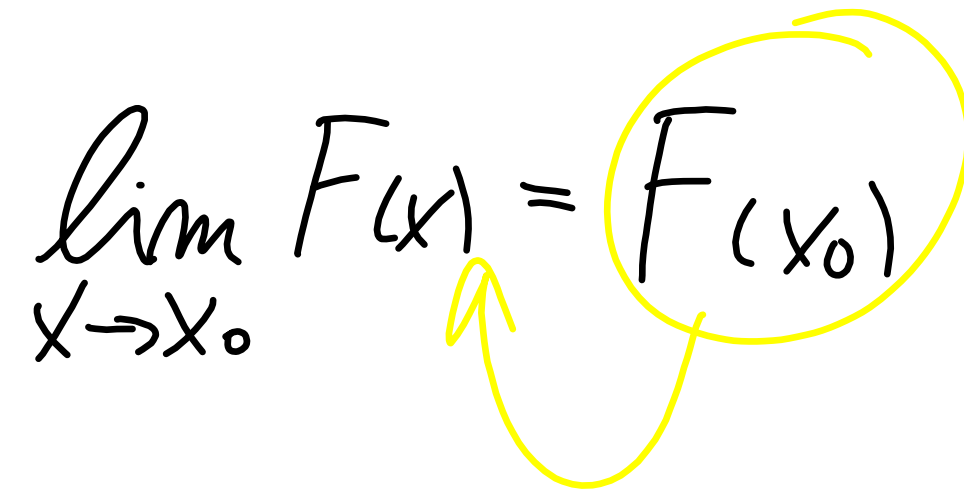
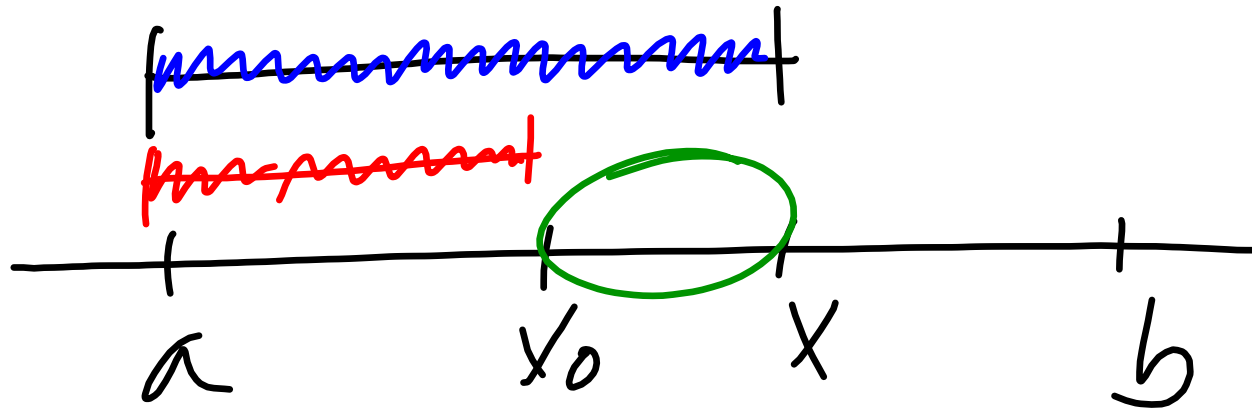
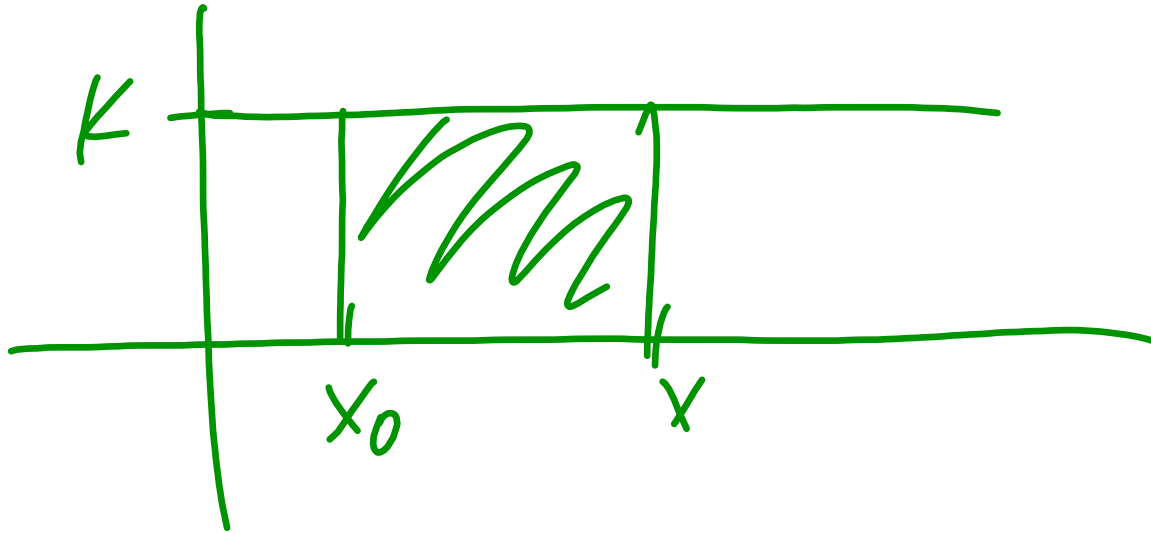
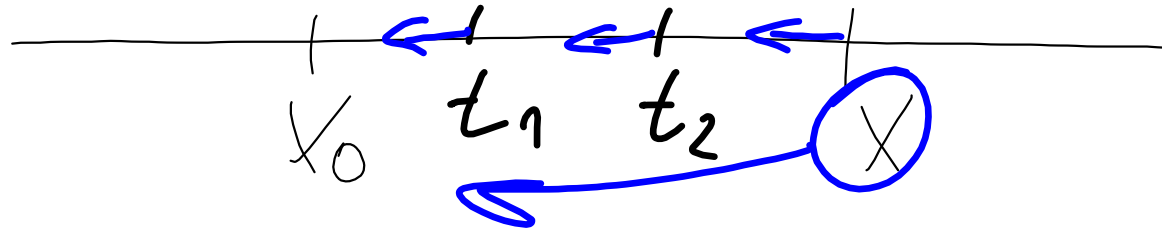


$$\lim_{x \rightarrow x_0} F(x) = F(x_0)$$
The image shows a handwritten mathematical equation: $\lim_{x \rightarrow x_0} F(x) = F(x_0)$. The term $F(x_0)$ on the right side of the equation is circled in yellow. A yellow arrow starts from the bottom of the circle and points to the $F(x)$ term on the left side of the equation.



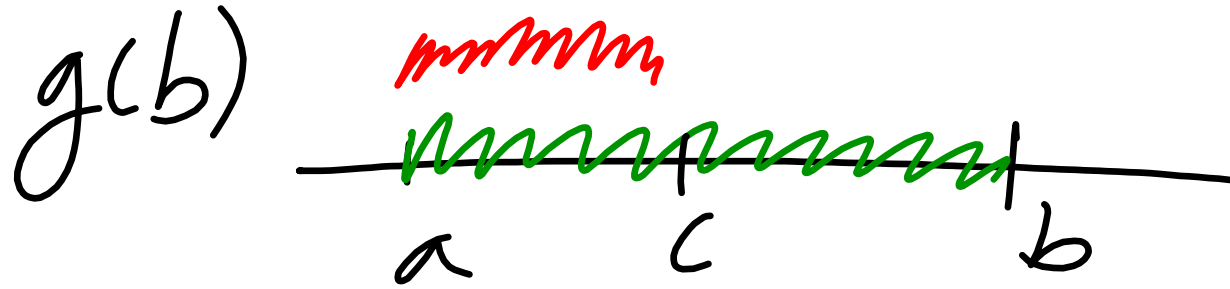


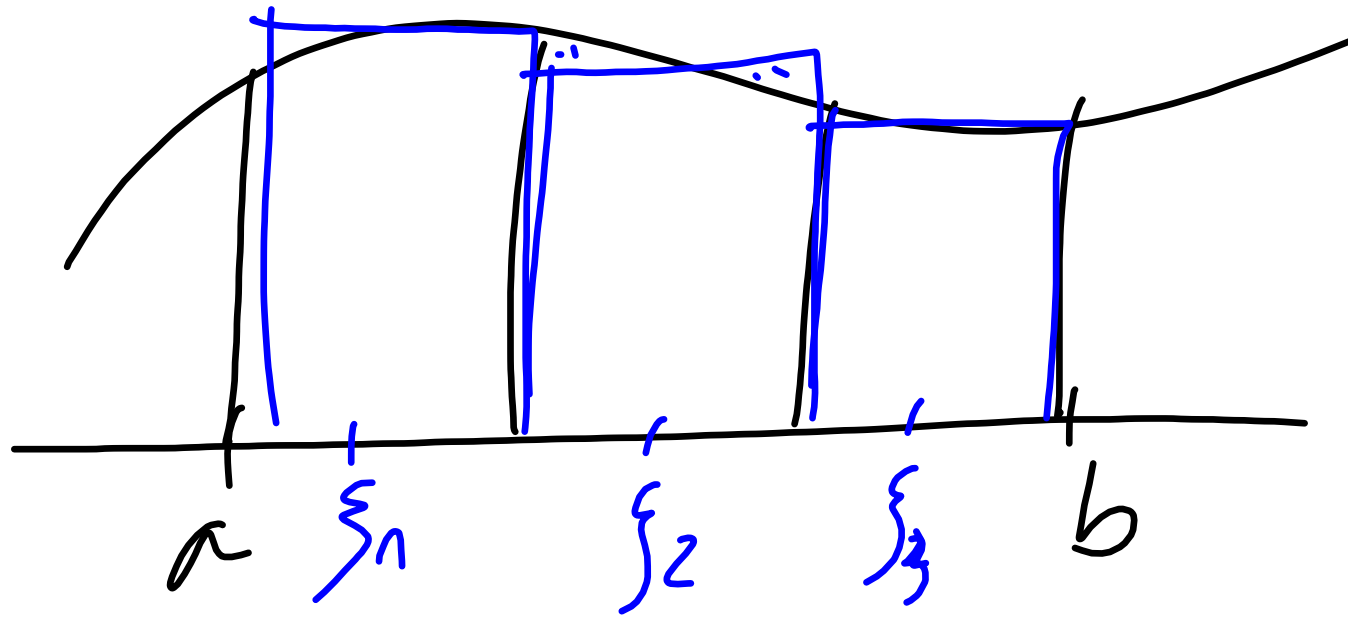


$$\int_a^x - \int_a^{x_0}$$

$$\left(\int_a^x t^2 dt \right)' = x^2$$

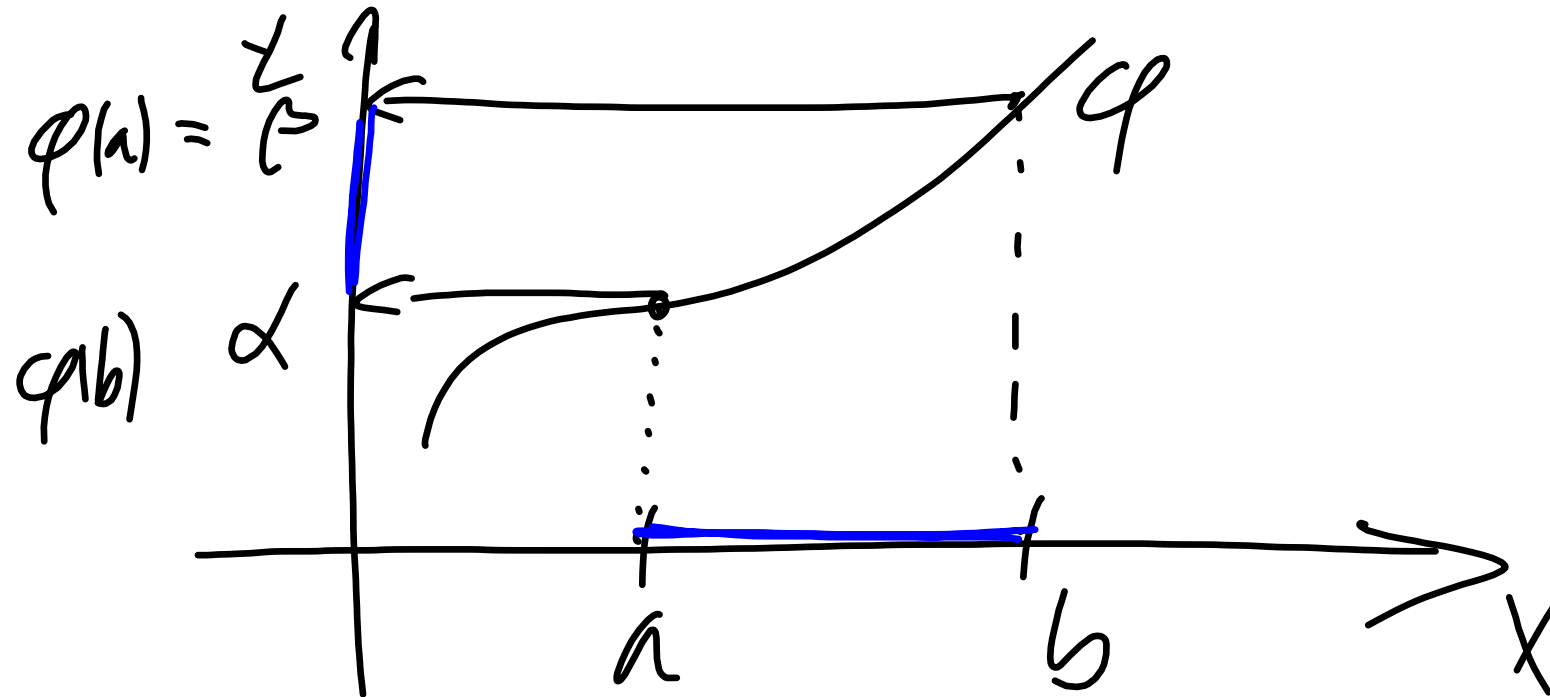
$$\left(\begin{array}{c} x^2 \\ \int \sin t \, dt \\ a \end{array} \right)' = \sin x^2 \cdot 2x$$

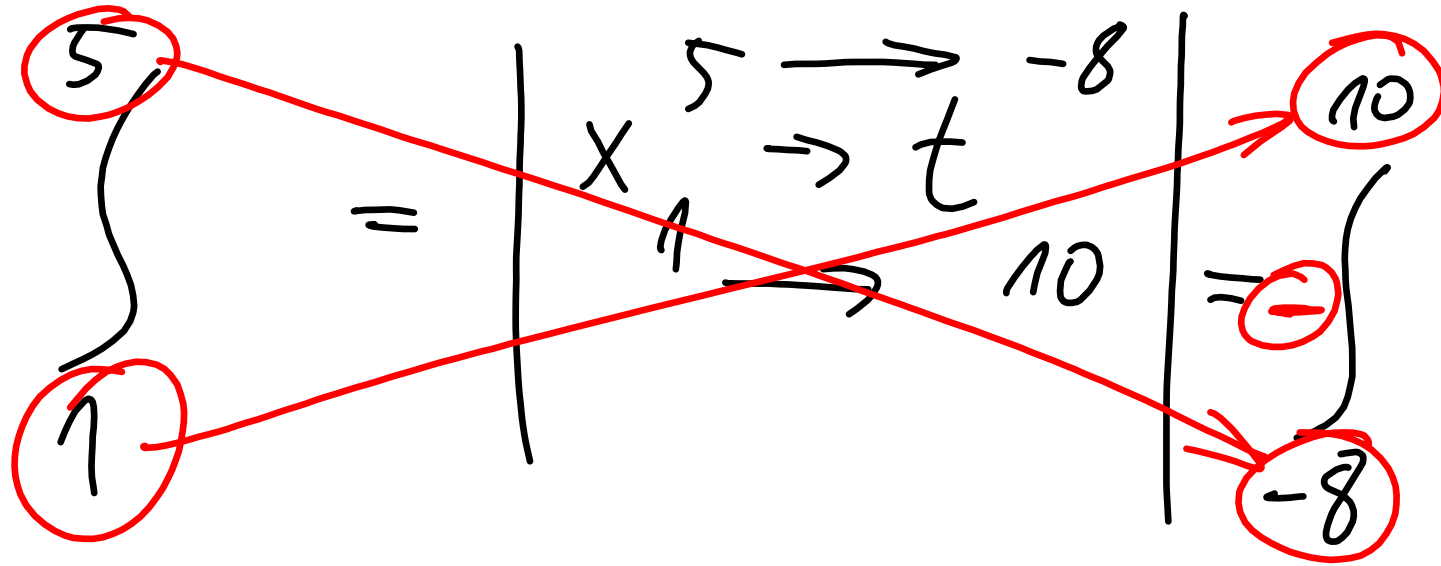




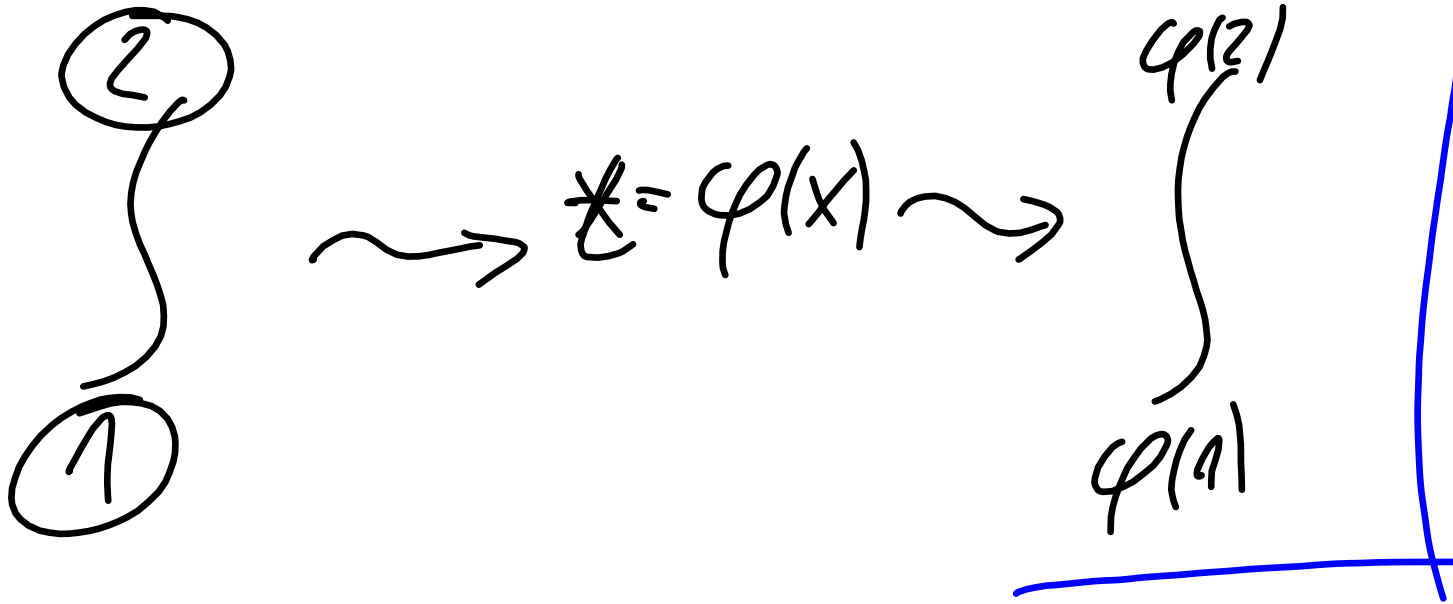
$$F'(c) = \frac{F(b) - F(a)}{b - a}$$

$$\int_a^b f(\varphi(x)) \cdot \varphi'(x) dx = \left| \begin{array}{l} t = \varphi(x) \\ \underline{dt} = \varphi'(x) dx \\ x = b \Rightarrow t = \varphi(b) \end{array} \right| =$$
$$= \int_{\varphi(a)}^{\varphi(b)} f(t) dt$$





$$\left(F(\varphi(x)) \right)' = \left(\int_{\alpha}^{\varphi(x)} f(t) dt \right)' = f(\varphi(x)) \cdot \varphi'(x)$$



P. $\sin(\omega x) / e^x / \sin(ax)$

P. $\ln ax, \arctan y$

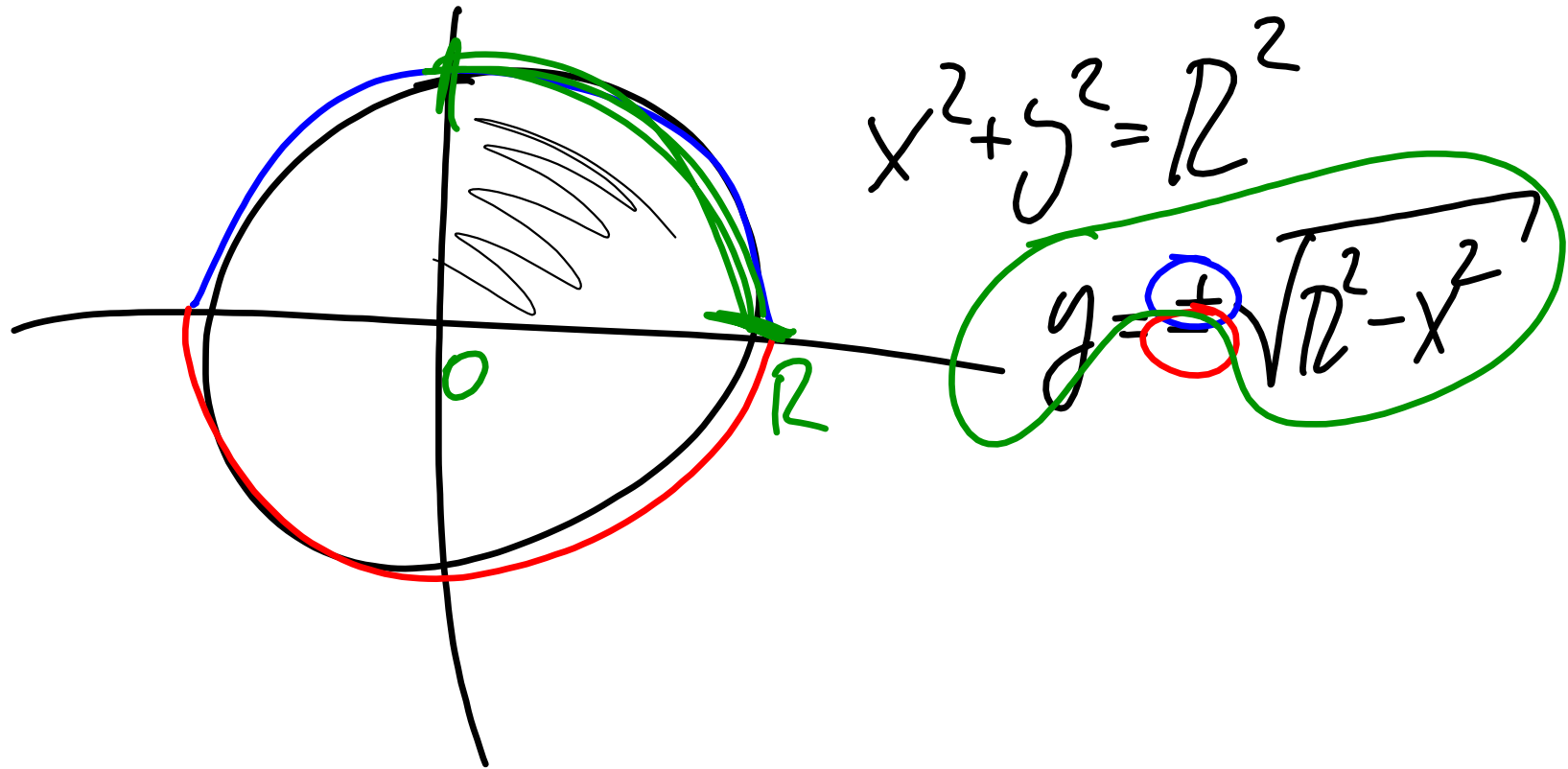
$$\int e^{5x} \cdot \sin 3x \, dx = \dots \text{ 2x p.p.}$$

$$I = f - \text{cond.} \cdot I$$

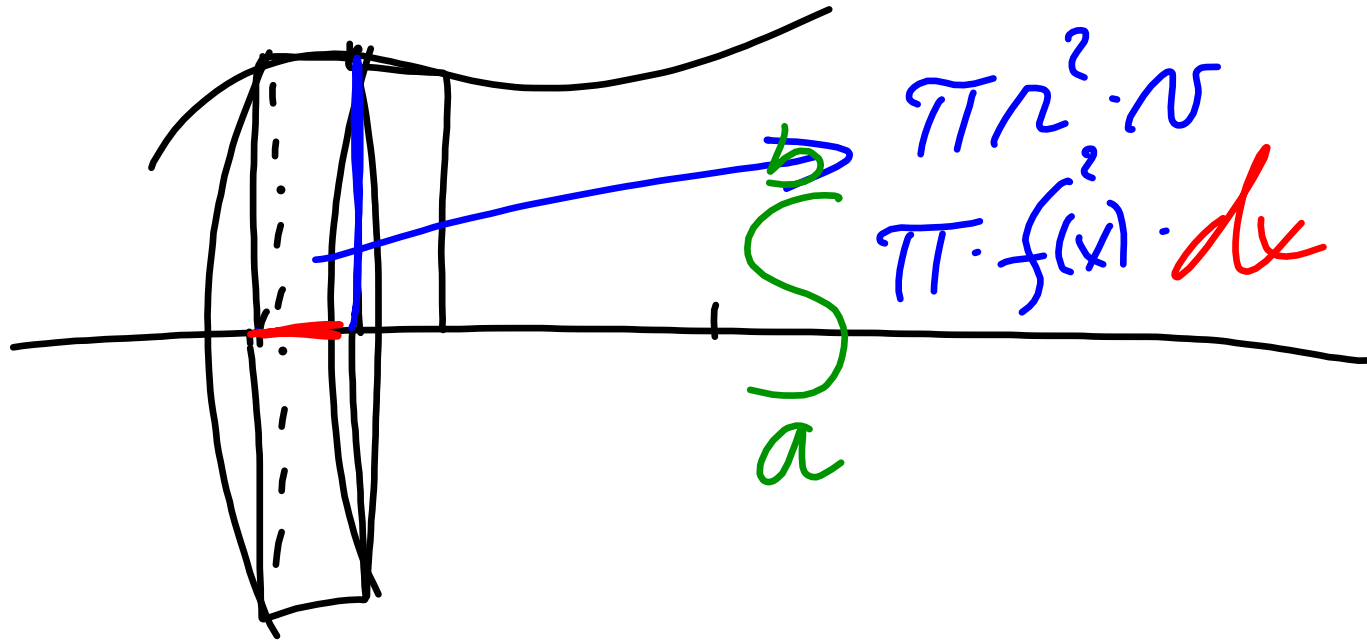
$$1 + x^2 = t^2$$

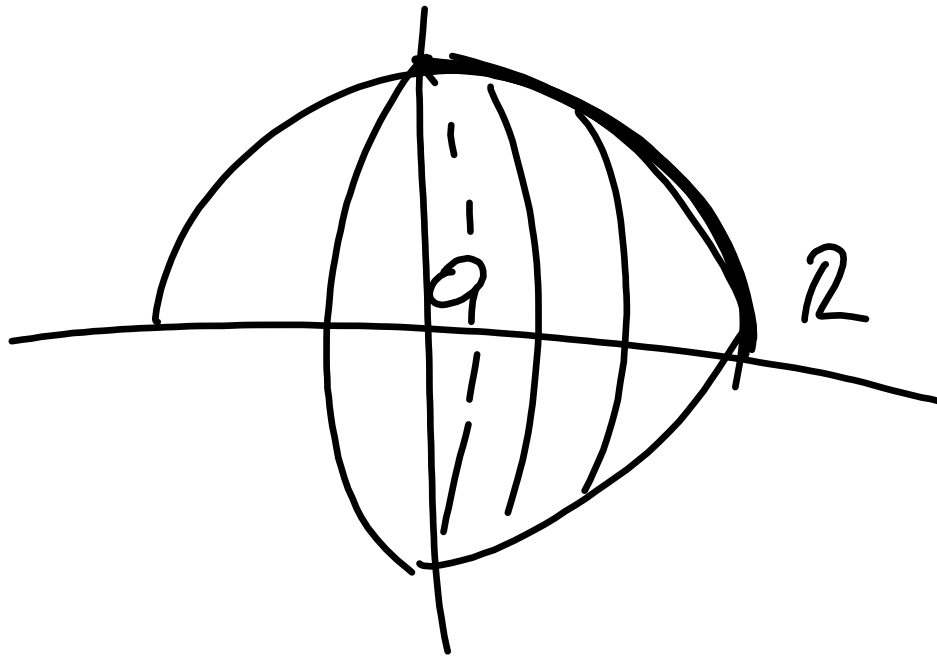
$$\int_a^b \sqrt{(\psi'(t))^2 + (\varphi'(t))^2} dt$$

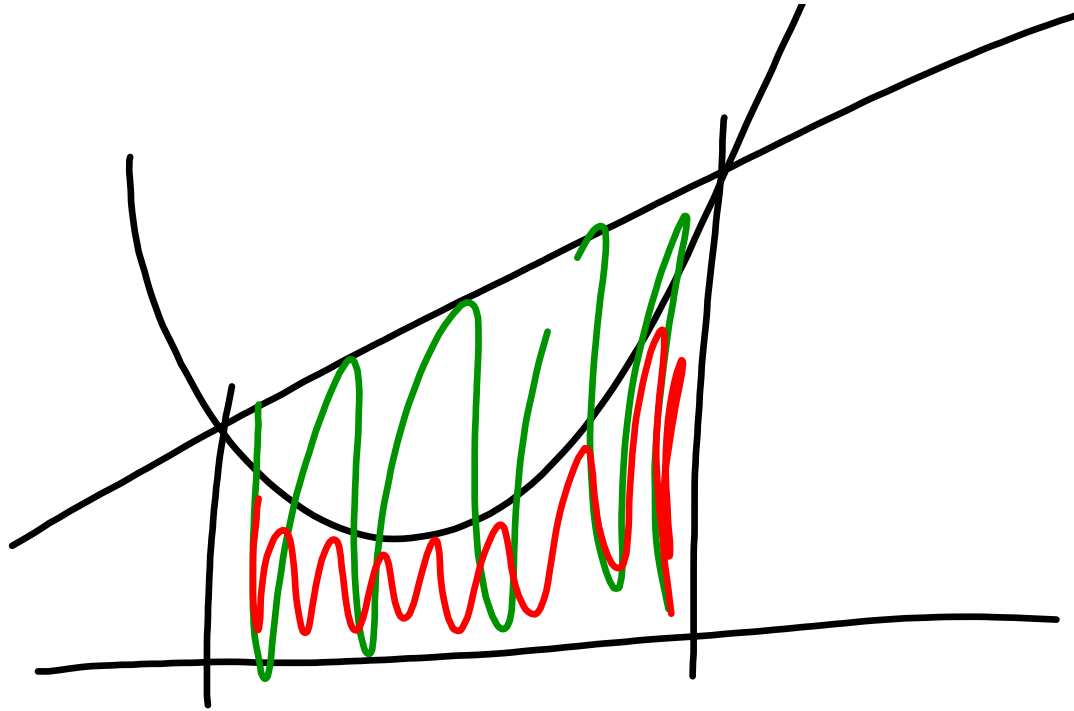
$$\begin{aligned} x &= \varphi(t) \\ y &= \psi(t), \quad t \in [a, b] \end{aligned}$$

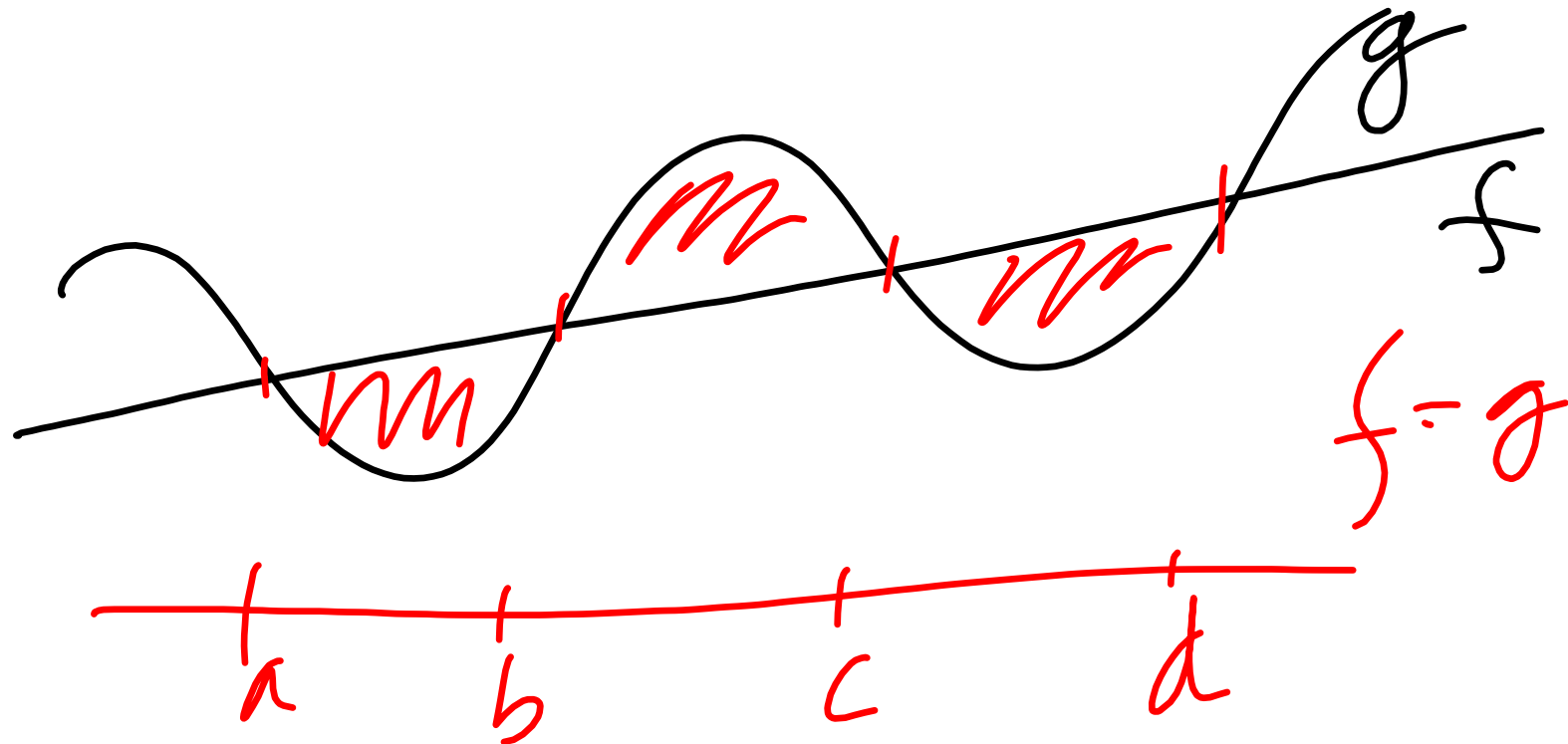


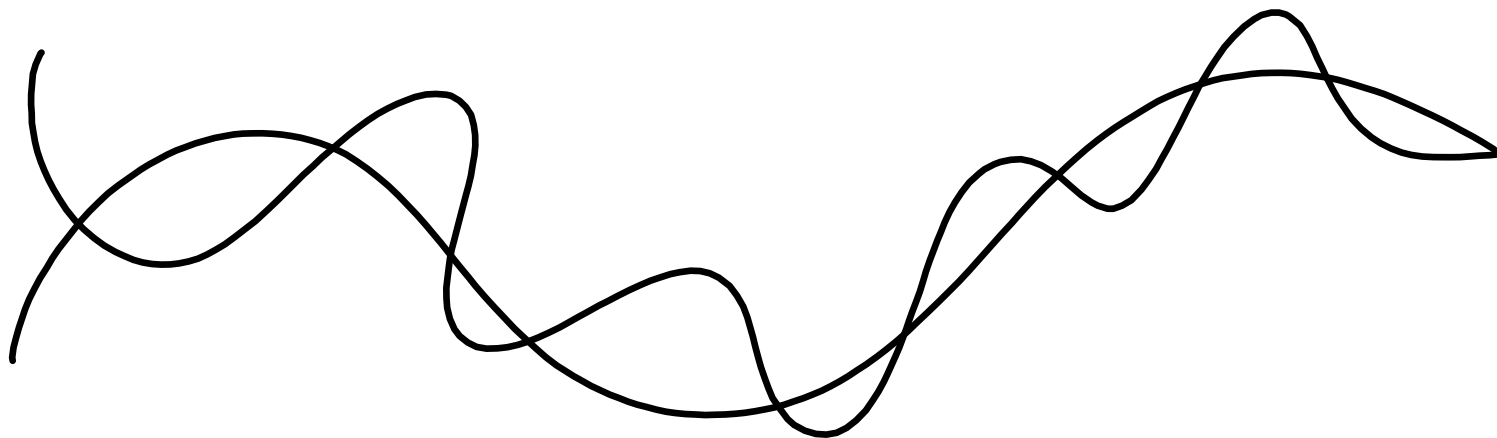




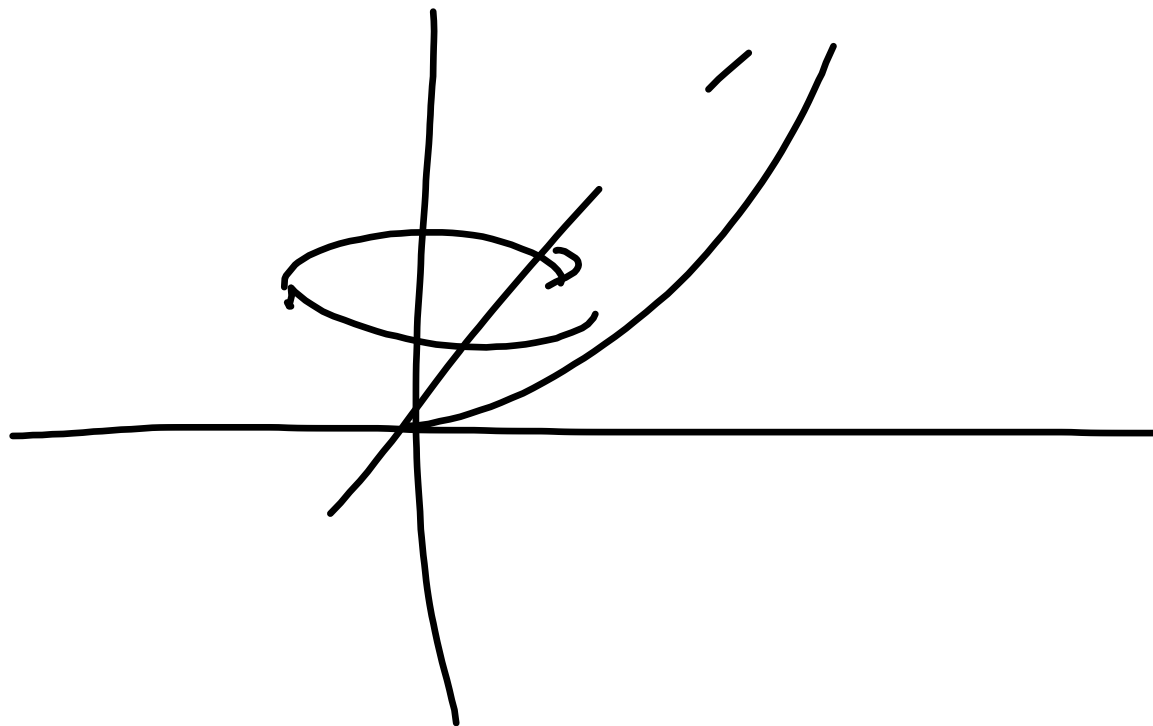


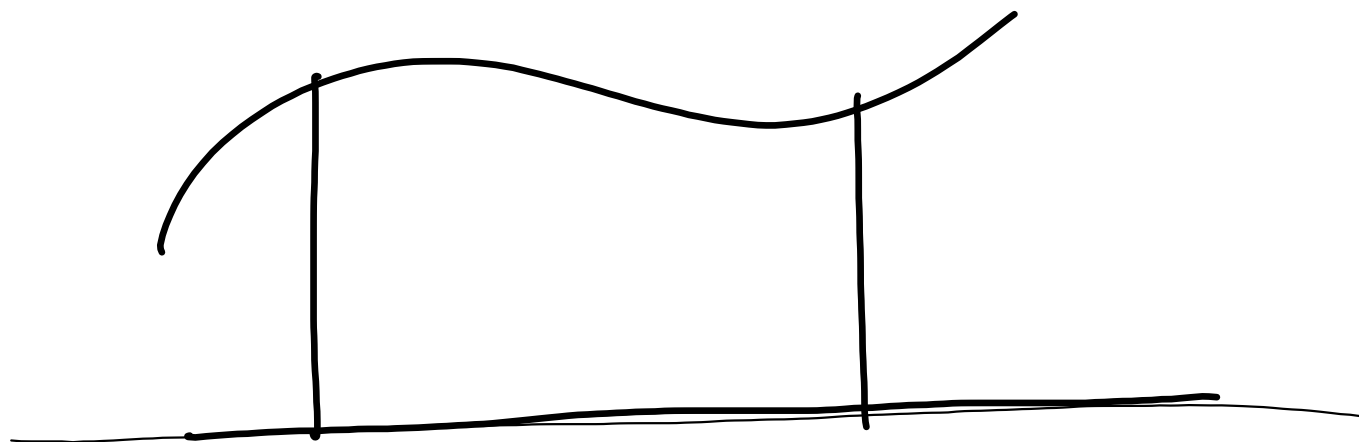






$$\pi \int f^2 - g^2 dx$$





$$\begin{array}{l} X = t \\ y = f(t) \end{array} \quad \Leftrightarrow \quad y = f(x)$$