Στοιχειώδη Ολοκληρώματα

- $\int a\,dx = a \cdot x$
- $\int (a \cdot x + b)^n\,dx = \frac{(a \cdot x + b)^{n+1}}{n+1}, n \neq -1$
- $\int \sqrt{a \cdot x + b}\,dx = \frac{2}{3 \cdot a} \cdot \sqrt{(a \cdot x + b)^3}$
- $\int \frac{1}{a \cdot x + b}\,dx = \frac{1}{a} \cdot \ln(a \cdot x + b)$
- $\int e^{a \cdot x + b}\,dx = \frac{1}{a} \cdot e^{a \cdot x + b}$
- $\int a^{b \cdot x + d}\,dx = \int e^{(b \cdot x + d) \cdot \ln a}\,dx = \frac{e^{(b \cdot x + d) \cdot \ln a}}{b \cdot \ln a} = \frac{a^{b \cdot x + d}}{b \cdot \ln a}, a > 0, a \neq 1$
- $\int \sin(a \cdot x + b)\,dx = -\frac{1}{a} \cdot \cos(a \cdot x + b)$
- $\int \cos(a \cdot x + b)\,dx = \frac{1}{a} \cdot \sin(a \cdot x + b)$
- $\int \tan(a \cdot x + b)\,dx = -\frac{1}{a} \cdot \ln|\cos(a \cdot x + b)|$
- $\int \cot(a \cdot x + b)\,dx = \frac{1}{a} \cdot \ln|\sin(a \cdot x + b)|$
- $\int \sinh(a \cdot x + b)\,dx = \frac{1}{a} \cdot \cosh(a \cdot x + b)$
- $\int \cosh(a \cdot x + b)\,dx = \frac{1}{a} \cdot \sinh(a \cdot x + b)$
- $\int \tanh(a \cdot x + b)\,dx = \frac{1}{a} \cdot \ln|\cosh(a \cdot x + b)|$
- $\int \coth(a \cdot x + b)\,dx = \frac{1}{a} \cdot \ln|\sinh(a \cdot x + b)|$
- $\int \frac{1}{\sqrt{x^2 - a^2}}\,dx = \ln\left|x + \sqrt{x^2 - a^2}\right|, x^2 > a^2$
- $\int \frac{1}{\sqrt{a^2 - x^2}}\,dx = \arcsin\left(\frac{x}{a}\right), x^2 < a^2$
- $\int \frac{1}{x^2 + a^2}\,dx = \frac{1}{a} \cdot \arctan\left(\frac{x}{a}\right)$
- $\int \frac{1}{\sqrt{x^2 + a^2}}\,dx = \ln\left|x + \sqrt{x^2 + a^2}\right| = \operatorname{arcsinh}\left(\frac{x}{a}\right)$

- $\int \frac{1}{a^2 - x^2}\, dx = \frac{1}{2 \cdot a} \cdot \ln\left(\frac{a + x}{a - x}\right) = \frac{1}{a} \cdot \operatorname{arctanh}\left(\frac{x}{a}\right), x^2 < a^2$
- $\int \frac{1}{x^2 - a^2}\, dx = \frac{1}{2 \cdot a} \cdot \ln\left(\frac{x - a}{x + a}\right) = -\frac{1}{a} \cdot \operatorname{arccoth}\left(\frac{x}{a}\right), x^2 > a^2$