

28. cvičení

<http://www.karlin.mff.cuni.cz/~kuncova/>
kytaristka@gmail.com

Příklady

1. $\int_0^{+\infty} \sin(\operatorname{arccot} x^\alpha) dx$
2. $\int_0^{\pi/2} x^a \left(\frac{1}{2}\pi - x\right)^b \operatorname{tg}^c x dx$
3. $\int_1^{+\infty} \frac{1}{x^a} \ln \frac{x^2 - 1}{x^2 + 1} \operatorname{arctan} \frac{x}{x^3 - 1} dx$
4. $\int_0^{+\infty} \frac{\ln(e^{2x} + e^x + 1)}{x^a} \sin x dx$
5. $\int_0^{+\infty} \frac{\operatorname{arctan} x^\alpha}{\ln^\beta(1+x)} \sin x dx$
6. $\int_0^1 \operatorname{arccos}^a(\sqrt{1-x^4}) \cos \frac{1}{\sqrt{1-x}} dx$
7. $\int_{1/2}^{+\infty} \frac{\cos \pi x}{\ln^\alpha 2x} dx$
8. $\int_0^{+\infty} \frac{\exp(\sin x)}{x^\alpha} \sin 2x dx$
9. $\int_0^{+\infty} x^a e^{-(bx+cx^2)} dx$
10. $\int_0^{+\infty} \frac{\ln x \sin x}{x \operatorname{arctan}(1-x)} dx$
11. $\int_0^{+\infty} \frac{\sin x^\alpha}{\operatorname{arctan}^\beta x} \sin \frac{1}{x} dx$