(PR) VYPOČÍTAJTE INTEGRÁLY Z RACIONÁLNYCH FUNKCIÍ

a) $\int \frac{5x^3+9x^2-22x-8}{x^3-4x}\,dx$

b) $\int \frac{-2x+19}{x^2+x-6}\,dx$

c) $\int \frac{x^2+1}{x^4+x^3}\,dx$

d) $\int \frac{5x^2-7x+10}{x^3-x^2-4x-6}\,dx$

e) $\int \frac{4x^2+x-13}{2x^3+12x^2+11x+5}\,dx$

f) $\int \frac{1}{x^3+1}\,dx$

g) $\int \frac{x^5+x^4-7x^3+8x-3}{x^3+x^2-6x}\,dx$

h) $\int \frac{6x-13}{4x^2+4x+17}\,dx$

i) $\int \frac{\cos x}{\sin^2 x+5\sin x-6}\,dx$

j) $\int \frac{\sqrt[6]{x}+1}{\sqrt[6]{x^7}+\sqrt[4]{x^5}}\,dx$

PR

$\int \cos(\ln x)\,dx$

$\int \frac{1}{x^2}\sqrt{\frac{2x+1}{x+1}}\,dx \quad \dots \quad t=\sqrt{\frac{2x+1}{x+1}}$

$\int \frac{1}{2\sin x-\cos x+5}\,dx \quad \dots \quad t=\operatorname{tg}\frac{x}{2}$

$\int e^{\sqrt{x}}\,dx \quad \dots \quad t=\sqrt{x}$

$\int \frac{1-\sqrt[6]{x+1}}{x+1+\sqrt[3]{(x+1)^4}}\,dx \quad t=\sqrt[6]{x+1}$

$\int \frac{1}{x+\sqrt{2x-1}}\,dx \quad t=\sqrt{2x-1}$

$\int \frac{\sqrt{x-1}}{x+2\sqrt{x-1}}\,dx \quad t=\sqrt{x-1}$

$\int \frac{1}{3-\cos x}\,dx \quad t=\operatorname{tg}\frac{x}{2}$

$\int \frac{1}{3+\cos x+\sin x}\,dx \quad t=\operatorname{tg}\frac{x}{2}$

$\int \frac{1+\sin x+\cos x}{1-\sin x-\cos x}\,dx \quad t=\operatorname{tg}\frac{x}{2}$

$\int \frac{dx}{\sin^2 x+3\cos^2 x+2} \quad t=\operatorname{tg} x$

$\int \frac{\sin x-\cos x}{\sqrt[4]{\sin x+\cos x}}\,dx \quad t=\sin x+\cos x$

$\int \frac{\sqrt[3]{x}}{x+\sqrt[6]{x^5}}\,dx \quad x=t^6$