Obliczyć całki.

$$\int dx$$
$$\int 2dx$$
$$\int xdx$$
$$\int x^2dx$$
$$\int 2x^3dx$$
$$\int \sqrt{x}dx$$
$$\int \sqrt{x^3}dx$$
$$\int \sqrt[3]{x}dx$$
$$\int \frac{1}{x}dx$$
$$\int \frac{1}{x^2}dx$$

$$\int \frac{1}{x^4}dx$$
$$\int \frac{1}{\sqrt{x}}dx$$
$$\int \frac{1}{\sqrt[3]{x}}dx$$
$$\int \frac{1}{\sqrt{x^3}}dx$$
$$\int \frac{x}{\sqrt{x}}dx$$
$$\int x\sqrt{x}dx$$
$$\int \left(x^2+\sqrt{x}-e^x\right)dx$$
$$\int \frac{x+2\sqrt[3]{x}-\sqrt{x^3}}{\sqrt{x}}dx$$
$$\int 3^x dx$$

$$\int \frac{1}{2^x}dx$$
$$\int 4^x5^{-x+2}dx$$
$$\int \frac{2^x-5^x}{10^x}dx$$
$$\int \frac{1-x}{1-\sqrt[3]{x}}dx$$
$$\int \frac{e^{-2x}-4}{e^{-x}+2}dx$$
$$\int \frac{x^2}{x^2+1}dx$$
$$\int \frac{x^4}{x^2+1}dx$$
$$\int \frac{\cos 2x}{\cos x-\sin x}dx$$
$$\int \frac{1}{\cos^2 x\sin^2 x}dx$$

$$\int \sin 2xdx$$
$$\int \cos\frac{x}{3}dx$$
$$\int e^{2x}dx$$
$$\int \sin^2 xdx$$
$$\int \cos^2\frac{x}{2}dx$$
$$\int tgxdx$$
$$\int tg^2xdx$$

Korzystając z twierdzenia o całkowaniu przez części obliczyć podane całki.

$$\int \ln xdx$$
$$\int x^2\sin xdx$$
$$\int xarctgxdx$$
$$\int e^{2x}\sin xdx$$

$$\int \cos\ln xdx$$
$$\int x^2 2^x dx$$
$$\int \sqrt{x}arctg\sqrt{x}dx$$
$$\int xchxdx$$

$$\int x\ln^2 xdx$$
$$\int \frac{x}{\cos^2 x}dx$$
$$\int xe^{-2x}dx$$
$$\int 3^x\cos xdx$$

Stosując odpowiednie podstawienia obliczyć podane całki.

$$\int (3x-4)^8dx$$
$$\int \sqrt{9x-1}dx$$
$$\int \sin 3xdx$$
$$\int \frac{\cos\sqrt{x}}{\sqrt{x}}dx$$
$$\int (x+1)\cos(x^2+2x+1)dx$$
$$\int \frac{\sqrt{2x-1}}{x}dx$$
$$\int \frac{\cos x}{\sqrt{\sin x+1}}dx$$

$$\int \frac{1}{chx}dx$$
$$\int \frac{x+2}{x^2+4x+3}dx$$
$$\int \frac{dx}{\sqrt{1-9x^2}}$$
$$\int x^3\sqrt[6]{4x^4+1}dx$$
$$\int \frac{\ln x}{x}dx$$
$$\int \frac{e^x}{e^{2x}+1}dx$$
$$\int \frac{2\sin x}{5-4cox}dx$$

$$\int \sin^5 dx$$
$$\int \frac{1}{\sqrt{4x-x^2}}dx$$
$$\int x^3e^{x^2}dx$$
$$\int \frac{e^{\ln x}}{x}dx$$
$$\int \frac{e^{tgx}}{\cos^2 x}dx$$
$$\int \frac{e^{arctgx}}{1+x^2}dx$$
$$\int \sqrt{x}2^{-\sqrt{x}}dx$$
$$\int \frac{1}{x\ln x\ln\ln x}dx$$