Ćwiczenia Całkowanie przez części

Zad.1. Oblicz całki:

$$\int x\,sinx\,dx \qquad \int x^2\,cosx\,dx$$

$$\int xe^{5x}\,dx \qquad \int (x-1)^3 sin(2x)\,dx$$

$$\int arcsinx\,dx \qquad \int arctgx\,dx$$

$$\int x\,arctgx\,dx \qquad \int \sqrt{x}\,lnx\,dx$$

$$\int \frac{lnx}{x^5}\,dx \qquad \int x^2 cos^2 x\,dx$$

$$\int sin(lnx)\,dx \qquad \int cos(lnx)\,dx$$

$$\int e^x sin(3x)\,dx \qquad \int e^{2x} sinx\,dx$$

$$\int \frac{x}{cos^2 x}\,dx \qquad \int \frac{x}{sin^2(x+1)}\,dx$$

$$\int x(arctgx)^2\,dx \qquad \int x\,ln^2 x\,dx$$

$$\int ln^3 x\,dx \qquad \int \frac{arcsinx}{\sqrt{(1-x^2)^3}}\,dx$$

$$\int (arcsinx)^2\,dx \qquad \int arcsin\sqrt{x}\,dx$$

$$\int x^3 e^{x^2}\,dx \qquad \int sin\sqrt{x}\,dx$$

$$\int \frac{arctg(e^x)}{e^x}\,dx \qquad \int \frac{ln(arcsinx)}{\sqrt{1-x^2}}\,dx$$

$$\int \frac{ln(sinx)}{sin^2 x}\,dx \qquad \int \frac{x}{sinh^2 x}\,dx$$

$$\int arcsin\frac{1}{x}\,dx \qquad \int arctg\frac{1}{x}\,dx$$

$$\int x\,arcsin\frac{1}{x}\,dx \qquad \int x\,arctg\frac{1}{x}\,dx$$

$$\int (arcsinx)^2\,dx \qquad \int arcsin\sqrt{x}\,dx$$