

Funzioni primitive (L. V., 15-03-01)

$$\begin{array}{lll}
 \int \frac{1}{5x^2+2} dx & \int \frac{3x-1}{x^2+3x+2} dx & \int \sqrt[3]{1-3x} dx \\
 \int \frac{1}{\sqrt{x+1}+\sqrt{x-2}} dx & \int \frac{\sqrt{x^4+x^{-4}+2}}{x^3} dx & \int \left(1 - \frac{1}{x^2}\right) \sqrt{x\sqrt{x}} dx \\
 \int \frac{1}{1-x^2} \log \frac{1+x}{1-x} dx & \int \frac{1}{e^{x/2}+e^x} dx & \int \frac{1}{(1+x)\sqrt{x}} dx \\
 \int x \arctan x dx & \int x^a \log x dx \quad (\text{attenzione al caso } a = -1) & \\
 \int x^2 \arcsin x dx & \int e^{2x} \sin^2 x dx & \int \frac{1}{a+bx^2} dx \quad (a > 0, b > 0) \\
 \int \log(x^2 + x + 2) dx & \int \frac{x}{x^4-2x^2+1} dx & \int \frac{2x+3}{x^2+3x-100} dx \\
 \int \frac{x^2}{2+3x^2} dx & \int \frac{2x+3}{(x-2)(x+5)} dx & \int xe^{-x} dx \\
 \int \frac{x}{\sqrt{1-x^2}} dx & \int \operatorname{Th}^2(x) dx & \int \frac{1}{x^2-2x+2} dx \\
 \int x^2 \sin(2x) dx & \int \frac{e^x}{2+e^x} dx & \int \frac{\sqrt{1+x^2}+\sqrt{1-x^2}}{\sqrt{1-x^4}} dx \\
 \int \frac{1}{x^2-2x+1} dx & \int x \arctan x dx & \int \frac{1}{\sqrt{1+x}+\sqrt{1-x}} dx \\
 \int \frac{2x-2}{x^2-2x+2} dx & \int x^2 e^{-2x} dx & \int \frac{1}{(1+x)\sqrt{x}} dx \\
 \int \frac{\sqrt{x-2}\sqrt[3]{x^2+1}}{\sqrt{x}} dx & \int \frac{x^{10}}{x^2+x-2} dx & \int x\sqrt{2-5x} dx \\
 \int \frac{x^3}{1+x^4} dx & \int \sin x \log(\tan x) dx & \int \frac{x}{(1+x^2)^2} dx \\
 \int (2^x + 3^x)^2 dx & \int x f''(x) dx \quad (\text{dove } f \text{ è due volte derivabile}) & \\
 \int \frac{x^3}{x^8-2} dx & \int \frac{x^2+3}{x^2-1} dx & \int \cos^3 x dx \\
 \int \frac{\log^2 x}{x} dx & \int \frac{1}{\sqrt{5-2x^2}} dx & \int \frac{\arctan x}{1+x^2} dx \\
 \int \sin^4 x dx & \int \frac{x}{\sqrt[3]{1-3x}} dx & \int \frac{1}{1+e^x} dx \\
 \int \sqrt{1+2x^2} dx & \int x^3 \sqrt{1+x^2} dx & \int x^3 e^{-x^2} dx
 \end{array}$$