

Calcolare i seguenti integrali indefiniti:

$$\begin{aligned} & \int (x^3 + \cos x) dx; \quad \int \sqrt{x^5} dx; \quad \int (8x^3 + 3x - 1) dx; \quad \int \sin^3 x \cos x dx; \\ & \int (6x^2 + \cos(x)) dx; \quad \int \frac{3}{x^4} dx; \quad \int x^{\frac{2}{3}} dx; \quad \int \frac{x^3 + 2x^2 + 1}{x^2} dx; \\ & \int \frac{2s}{s^2 + 1} ds; \quad \int x e^{x^2} dx; \quad \int (\sin(x) + e^x) dx; \quad \int (\tan(x) + 4x) dx; \\ & \int \left(\frac{1}{t^3} - \frac{1}{t^4} \right) dt; \quad \int \frac{x^3}{\sqrt{1-x^4}} dx; \quad \int (x^3 + x^2 + 1)^4 (3x^2 + 2x) dx; \\ & \int \frac{x^3 + 3x^2}{x^4 + 4x^3} dx; \quad \int x^2 (x^3 + 2)^4 dx; \quad \int \frac{3x + 2}{4x + 5} dx; \quad \int \frac{5x^4 - 2x^3 + 1}{x} dx; \\ & \int \frac{4x^3 - 3x + 2}{x - 1} dx; \quad \int \frac{2x}{x^2 + 1} dx; \quad \int \frac{1}{1 + x^2} dx; \quad \int \frac{1}{1 + 4x^2} dx; \\ & \int \frac{1}{3 + x^2} dx; \quad \int \frac{1}{\sqrt{1 - 3x^2}} dx; \quad \int \sqrt{x} dx; \quad \int (\tan(x) + \tan^2(x)) dx; \\ & \int \sqrt{1 - x} dx; \quad \int \left(\sqrt{u} - \frac{1}{\sqrt{u}} \right) du; \quad \int e^x (x + 1) dx; \quad \int \frac{2t + 3}{t^2 + 9} dt; \\ & \int \frac{1}{2x^2 + 3} dx; \quad \int x \sin(4x^2) dx; \quad \int \frac{x}{3x^2 + 1} dx; \end{aligned}$$