

F) Neodređeni integral (konstanta je integriranja C radi pojednostavljena ispuštena)

$$\int x^n dx = \frac{x^{n+1}}{n+1}, \quad n \in \mathbb{R} \setminus \{-1\},$$

$$\int \frac{dx}{x} = \ln x, \quad x \neq 1, \quad x \in \mathbb{R} \setminus \{1\},$$

$$\int (\sqrt{a+bx}) dx = \frac{2}{3b} \sqrt{(a+bx)^3},$$

$$\int x(\sqrt{a+bx}) dx = \frac{2}{15b^2} (3bx-2a) \sqrt{(a+bx)^3},$$

$$\int \frac{dx}{\sqrt{a+bx}} = \frac{2\sqrt{a+bx}}{b}, \quad x \in \mathbb{R} \setminus \left\{ -\frac{a}{b} \right\},$$

$$\int \frac{xdx}{a+bx} = \frac{1}{b^2} [a+bx - a \ln(a+bx)], \quad x \in \mathbb{R} \setminus \left\{ -\frac{a}{b} \right\},$$

$$\int \frac{dx}{a+bx^2} = \frac{1}{\sqrt{ab}} \tan^{-1} \frac{x\sqrt{ab}}{a}, \quad a \neq -bx^2,$$

$$\int \frac{xdx}{a+bx^2} = \frac{1}{2b} \ln(a+bx^2), \quad a \neq -bx^2,$$

$$\int (\sqrt{x^2 \pm a^2}) dx = \frac{1}{2} \left[x\sqrt{x^2 \pm a^2} \pm a^2 \ln \left(x + \sqrt{x^2 \pm a^2} \right) \right],$$

$$\int x(\sqrt{x^2 \pm a^2}) dx = \frac{1}{3} \sqrt{(x^2 \pm a^2)^3},$$

$$\int (\sqrt{a^2 - x^2}) dx = \frac{1}{2} \left(x\sqrt{a^2 - x^2} + a^2 \sin^{-1} \frac{x}{a} \right),$$

$$\int x(\sqrt{a^2 - x^2}) dx = -\frac{1}{3} \sqrt{(a^2 - x^2)^3},$$

$$\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln \left(x + \sqrt{x^2 \pm a^2} \right),$$

$$\int \frac{dx}{\sqrt{a^2 - x^2}} = \sin^{-1} \frac{x}{a}, \quad x \in \mathbb{R} \setminus \{a\},$$

$$\int \frac{xdx}{\sqrt{a^2 \pm x^2}} = \pm \sqrt{a^2 \pm x^2},$$

$$\int x(\sqrt{x^2 \pm a^2}) dx = -\frac{1}{3} \sqrt{(x^2 \pm a^2)^3},$$

$$\int \sin x dx = -\cos x,$$

$$\int \cos x dx = \sin x,$$

$$\int \sin^2 x dx = \frac{x}{2} - \frac{\sin 2x}{4},$$

$$\int \cos^2 x dx = \frac{x}{2} + \frac{\sin 2x}{4},$$