Primitives niveau terminale - $15^{ième}$ feuille

$$A = \int \frac{z^5 dz}{\sqrt{1+z^2}}$$

$$B = \int \frac{e^{4t} dt}{(1+e^{2t})^{\frac{2}{3}}}$$

$$C = \int \frac{dx}{x^{\frac{1}{5}}\sqrt{1+x^{\frac{4}{5}}}}$$

$$D = \int x sec^2 x dx$$

$$E = \int x arcsin x dx$$

$$F = \int \frac{(x^3+x^2)dx}{x^2+x-2}$$

$$G = \int \frac{(x^3+1)dx}{x^3-x}$$

$$H = \int \frac{x dx}{(x-1)^2}$$

$$I = \int \frac{(2e^{2x}-e^x)dx}{\sqrt{3e^{2x}-6e^x-1}}$$

$$J = \int \frac{(x+1)dx}{(x^2+2x-3)^{\frac{2}{3}}}$$

$$K = \int \frac{dy}{(2y+1)\sqrt{y^2+y}}$$

$$L = \int \frac{dx}{x^2\sqrt{a^2-x^2}}$$

Cliquez ☞ **ici** pour toutes les réponses.

Réponse 15

$$A = \frac{1}{15}(8 - 4z^2 + 3z^4)\sqrt{1+z^2} + C, C \in \mathbb{R}$$
$$B = \frac{3}{8}(e^{2t} - 3)\sqrt[3]{1+e^{2t}} + C, C \in \mathbb{R}$$
$$C = \frac{5}{2}(1 + x^{\frac{4}{5}})^{\frac{1}{2}} + C, C \in \mathbb{R}$$
$$D = xtanx + ln\left|cosx\right| + C, C \in \mathbb{R}$$
$$E = \frac{1}{4}[(2x^2 - 1)arcsinx + x\sqrt{1-x^2}] + C, C \in \mathbb{R}$$
$$F = \frac{x^2}{2} + \frac{4}{3}ln\left|x+2\right| + \frac{2}{3}ln\left|x-1\right| + C, C \in \mathbb{R}$$
$$G = x + ln\left|\frac{x-1}{x}\right| + C, C \in \mathbb{R}$$
$$H = ln\left|x-1\right| - \frac{1}{x-1} + C, C \in \mathbb{R}$$
$$I = \frac{2}{3}(3e^{2x} - 6e^x - 1)^{\frac{1}{2}} + \frac{1}{\sqrt{3}}ln\left|e^x - 1 + \sqrt{e^{2x} - 2e^x - \frac{1}{3}}\right| + C, C \in \mathbb{R}$$
$$J = \frac{3}{2}\sqrt[3]{x^2 + 2x - 3} + C, C \in \mathbb{R}$$
$$K = arctan(2\sqrt{y^2 + y}) + C, C \in \mathbb{R}$$
$$L = -\frac{a^2x}{\sqrt{a^2 - x^2}} + C, C \in \mathbb{R}$$

☞ **Retour**