Primitives niveau terminale - $11^{ième}$ feuille

$$A = \int \frac{(2t^2 - 8t - 8)dt}{(t-2)(t^2+4)}$$
$$B = \int \frac{(x^2 + x - 10)dx}{(2x-3)(x^2+4)}$$
$$C = \int \frac{(x-18)dx}{4x^3 + 9x}$$
$$D = \int \frac{dx}{x^4 + x^2}$$
$$E = \int \frac{2xdx}{(x^2+1)(x+1)^2}$$
$$F = \int \frac{(x^3 + 3x)dx}{(x^2+1)^2}$$
$$G = \int \frac{(x^5 + 9x^3 - 9x^2 - 9)dx}{x^3 + 9x}$$
$$H = \int \frac{(4x^2 + 2x + 8)dx}{x(x^2+2)^2}$$
$$I = \int \frac{t^5 dt}{(t^2+4)^2}$$
$$J = \int \frac{dx}{x^3 + x^2 + x}$$
$$K = \int \frac{4dx}{x^4 - 1}$$
$$L = \int \frac{(2x^2 + 3x + 2)dx}{(x+2)(x^2+2x+2)}$$

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

Réponse 11

$$A = 2ln\left|\frac{t^2+4}{t-2}\right| + C, C \in \mathbb{R}$$

$$B = \frac{1}{2}ln\left|\frac{x^2+4}{2x-3}\right| + arctan\frac{x}{2} + C, C \in \mathbb{R}$$

$$C = ln\left|\frac{4x^2+9}{x^2}\right| + \frac{1}{6}arctan\frac{2x}{3} + C, C \in \mathbb{R}$$

$$D = -\frac{1}{x} - arctanx + C, C \in \mathbb{R}$$

$$E = arctanx + \frac{1}{x+1} + C, C \in \mathbb{R}$$

$$F = \frac{1}{2}ln\left|x^2+1\right| - \frac{1}{x^2+1} + C, C \in \mathbb{R}$$

$$G = \frac{x^3}{3} - ln\left|x(x^2+9)^4\right| + C, C \in \mathbb{R}$$

$$H = ln\left|\frac{x^2}{x^2+2}\right| + \frac{x}{2(x^2+2)} + \frac{\sqrt{2}}{4}arctan\frac{x}{\sqrt{2}} + C, C \in \mathbb{R}$$

$$I = \frac{t^2}{2} - 4ln\left|t^2+4\right| - \frac{8}{t^2+4} + C, C \in \mathbb{R}$$

$$J = -\frac{1}{2}ln\left|\frac{x^2+x+1}{x^2}\right| - \frac{\sqrt{3}}{3}arctan\frac{2x+1}{\sqrt{3}} + C, C \in \mathbb{R}$$

$$K = ln\left|\frac{x-1}{x+1}\right| - 2arctanx + C, C \in \mathbb{R}$$

$$L = 2ln\left|x+2\right| - arctan(x+1) + C, C \in \mathbb{R}$$

☞ Retour