

## Integrales Indefinidas

Resolver:

$$a) \int (2x^2 - 4x + 5) dx = \frac{2x^3}{3} - 2x^2 + 5x + K$$

$$b) \int \left( 3x + \frac{1}{x^2} \right) dx = \frac{3x^2}{2} - \frac{1}{x} + K$$

$$c) \int \left( 2\sqrt[4]{x^3} - \frac{5}{x} \right) dx = \frac{8}{7}\sqrt[4]{x^7} - 5\ln|x| + K$$

$$d) \int \left( \frac{x^4 - 3x\sqrt{x} + 2}{x} \right) dx = \frac{x^4}{4} - 2\sqrt{x^3} + 2\ln|x| + K$$

$$e) \int (2x^2 + 3)^2 dx = \frac{5}{12} (2x^2 + 3)^3 + K$$

$$f) \int \frac{3x}{x^2 + 5} dx = \frac{3}{2} \ln|x^2 + 5| + K$$

$$g) \int \cos\left(\frac{x}{2}\right) dx = 2\operatorname{sen}\left(\frac{x}{2}\right) + K$$

$$h) \int \frac{3}{\sqrt{4-x^2}} dx = 3\operatorname{arcsen}\left(\frac{x}{2}\right) + K$$

$$i) \int \frac{x}{\sqrt{4-x^2}} dx = -\sqrt{4-x^2} + K$$

$$j) \int \frac{1 - \ln x}{x \ln x} dx = \ln|\ln|x|| - \ln|x| + K$$

$$k) \int \operatorname{tg} x dx = -\ln|\cos x| + K$$

$$l) \int \frac{e^{\ln x}}{x} dx = e^{\ln|x|} + K$$

$$m) \int \frac{3}{x^2 + 9} dx = \operatorname{arctg}\left(\frac{x}{3}\right) + K$$

$$n) \int \frac{1}{(1+x^2)\operatorname{arctg}x} dx = \ln|\operatorname{arctg}x| + K$$

$$\tilde{n}) \int \operatorname{tg}^2 x dx = \operatorname{tg}x - x + K$$

$$o) \int \frac{(x-1)^2}{2x} dx = x^2 - 2x - \frac{1}{2} \ln|x| + K$$

$$p) \int \frac{2e^x - e^{2x}}{e^x} dx = 2x + e^x + K$$