

Solución

$$\text{a) } \int (1 + x^2) \ln x \, dx = \left(x + \frac{x^3}{3} \right) \ln x - x - \frac{x^3}{9} + C$$

$$\text{b) } \int (2x - 1) 3^x \, dx = \frac{3^x}{\ln 3} (2x - 1) - \frac{2}{(\ln 3)^2} 3^x + C$$

$$\text{c) } \int x^2 \cos x \, dx = (x^2 - 2) \sin x + 2x \cos x + C$$