

$$\int u \, dv = uv - \int v \, du \, \text{or} \int uv' \, dt = uv - \int vu' \, dt$$

$$\ln(A) + \ln(B) = \ln(AB) \qquad \ln(A) - \ln(B) = \ln\left(\frac{A}{B}\right)$$

$$c \ln(A) = \ln(A^{c})$$

$$ax^{2} + bx + c = 0 \implies x = \frac{-b \pm \sqrt{b^{2} - 4ac}}{2a}$$