Integral Indefinida - Cambio de Variable

ByteLearn

$$\int (2x-1)^3 \, dx$$

$$= \int u^3 \frac{du}{2}$$

$$= \frac{1}{2} \int u^3 \, du$$

$$= \frac{1}{2}\left[\frac{u^4}{4}\right]$$

$$= \frac{1}{2}\left[\frac{(2x-1)^4}{4}\right) + C = \frac{(2x-1)^4}{8} + C$$

$u = 2x - 1$

$du = 2 - 0 \, dx$

$du = 2 \, dx$

$dx = \frac{du}{2}$

$$\int u^n du = \frac{u^{n+1}}{n+1}$$

$u = 2x - 1$