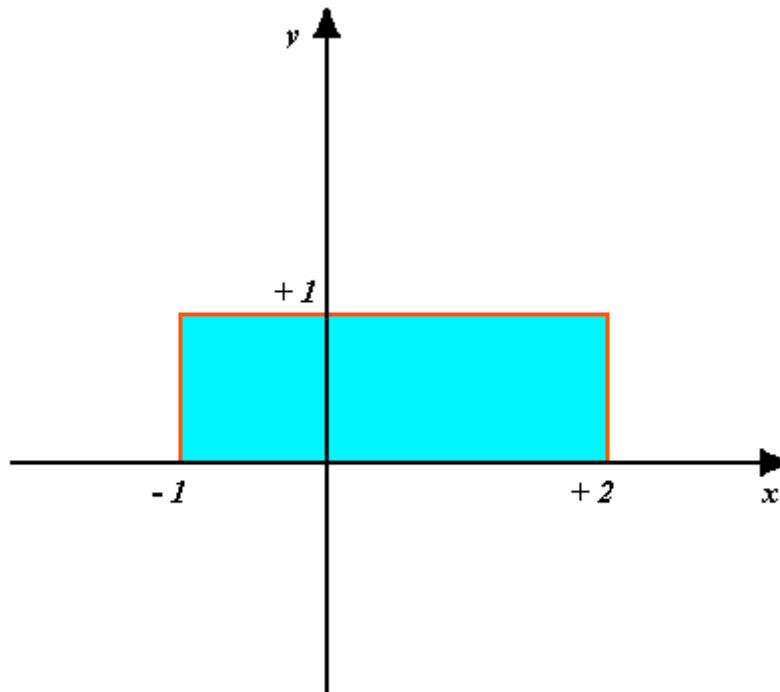


Calcolare l'integrale doppio

$$\iint_D (2x - y^2) dx dy$$

$$\text{con } D = \{(x, y) \in \mathbb{R}^2 : -1 \leq x \leq 2, \quad 0 \leq y \leq 1\}$$



Considerando il dominio normale a x si ha :

$$\iint_D (2x - y^2) dx dy = \int_{-1}^2 dx \int_0^1 (2x - y^2) dy = \int_{-1}^2 dx \left[2xy - \frac{y^3}{3} \right]_0^1 = \int_{-1}^2 \left(2x - \frac{1}{3} \right) dx = \left[x^2 - \frac{x}{3} \right]_{-1}^2 = 2$$