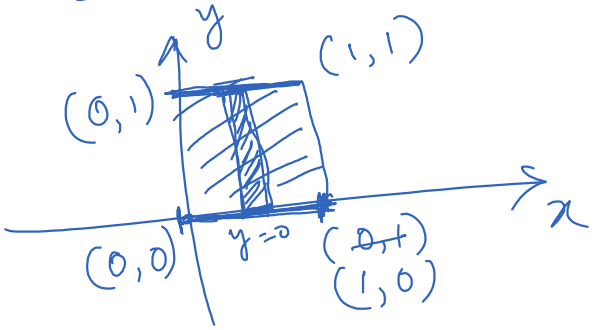
$\iint (1-x)\,dx\,dy$ ✓

$R: [0,1] \times [0,1]$

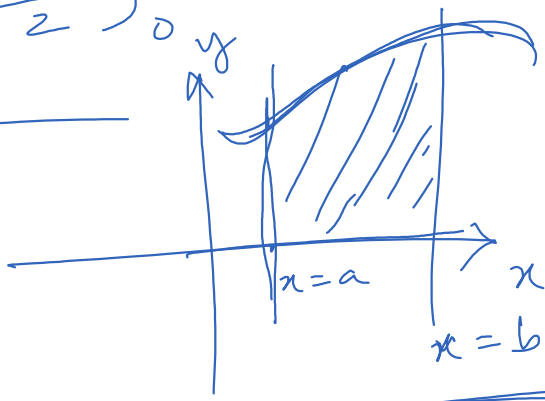


$= \int_{x=0}^{1} \left[\int_{y=0}^{1} (1-x)\,dy \right] dx$ ✓

$= \int_{x=0}^{1} \left[y - xy \right]_{y=0}^{1} dx$

$= \int_{x=0}^{1} (1-x)\,dx = \left[x - \frac{x^2}{2} \right]_0^1 = 1 - \frac{1}{2} = \frac{1}{2}$ Ans.

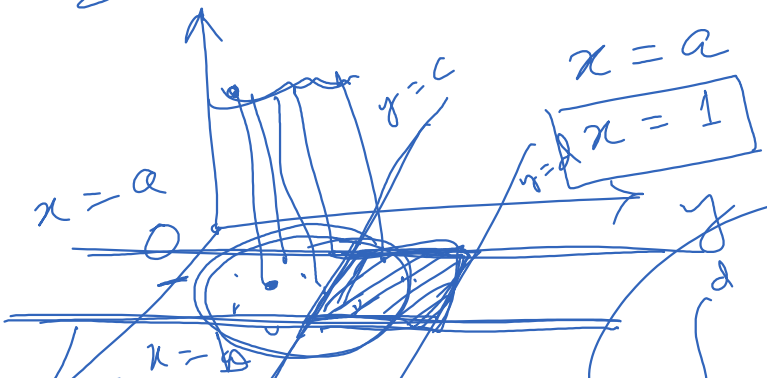
$\int_{x=a}^{b} f(x)\,dx =$



$\int_{x=a}^{b} \int_{y=c}^{d} f(x,y)\,dx\,dy$

$z = f(x,y)$

$x^2 + y^2 + z^2 = 40$ X



$\int_{y=c}^{d} \int_{x=a}^{b} dx\,dy$

(x, y)

~~(0,0)~~ ~~(0,2)~~

(1, 2)

$\int_{y=}^{} \int_{x=a}^{a} dx\, dy \quad (1, 2)$

$R := [a,b] \times [c,d]$

$R := \underbrace{[0,2]}_{x} \times \underbrace{[0,1]}_{y}$