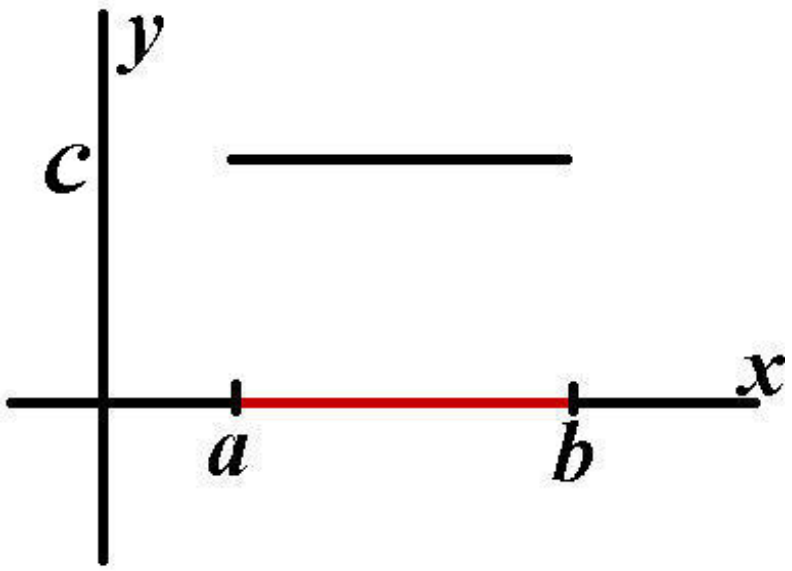
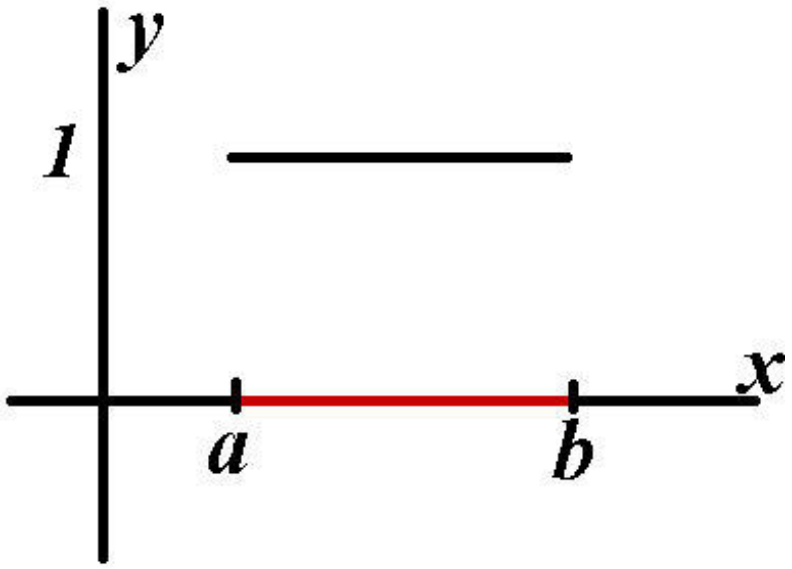
FoxTrot

BILL AMEND

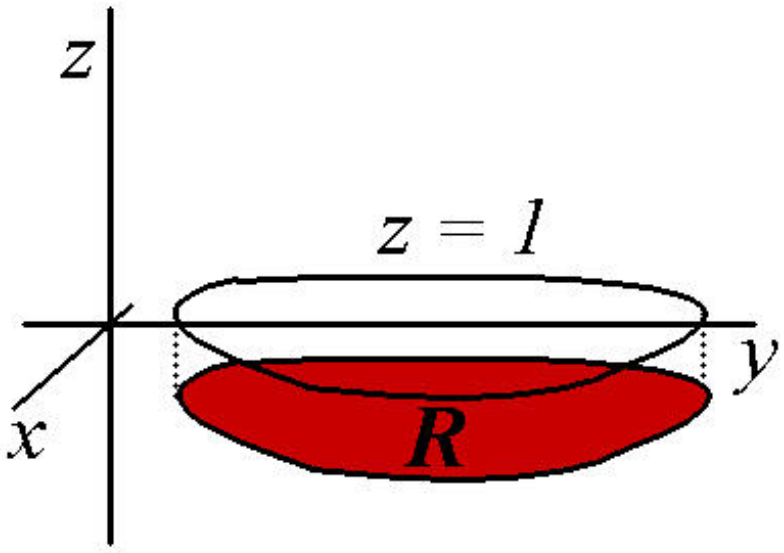
$$\int_a^b c\,dx = c\,(b-a)$$



$$\int_a^b 1\,dx = b - a$$



$$\iint_R 1\, dA = \text{Area}(R)$$

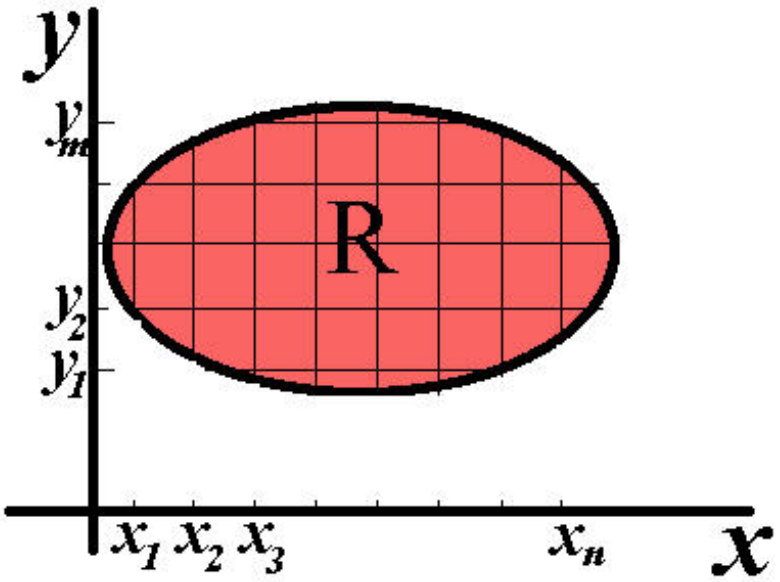


$$\lim_{n,m\to\infty} \sum_{i=1}^{n} \sum_{j=1}^{m} f(x_i,\ y_j)\, \Delta x\, \Delta y = \iint_R f(x,\, y)\, dx\, dy$$

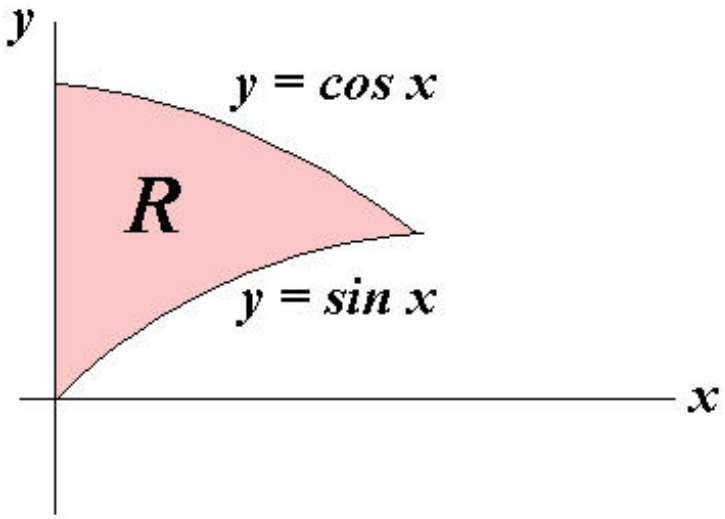
Therefore, if $f(x, y) = 1$ then:

$$\lim_{n,m\to\infty} \sum_{i=1}^{n} \sum_{j=1}^{m} 1\, \Delta x\, \Delta y = \iint_R 1\, dA$$

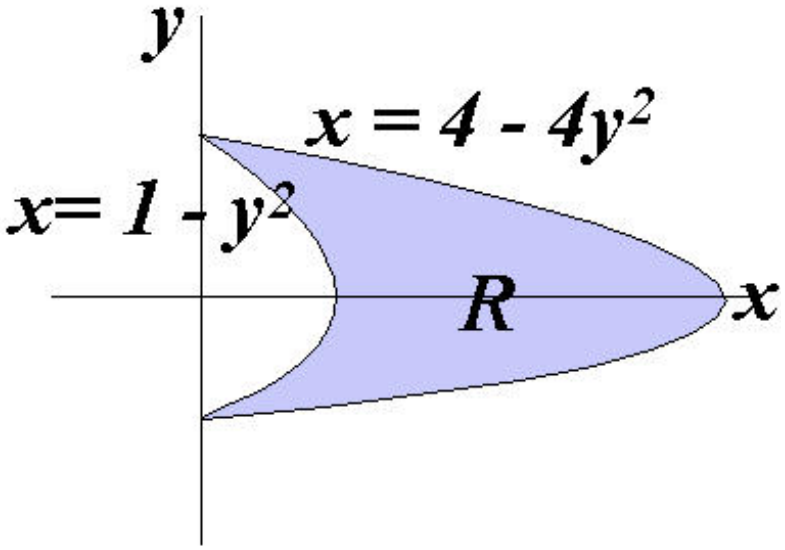
$$\lim_{n,m\to\infty} \sum_{i=1}^{n} \sum_{j=1}^{m} 1\,\Delta x\,\Delta y = \iint_R 1\,dA = \text{Area}(R)$$



$$\text{Area}(R) = \iint_R 1\, dA$$

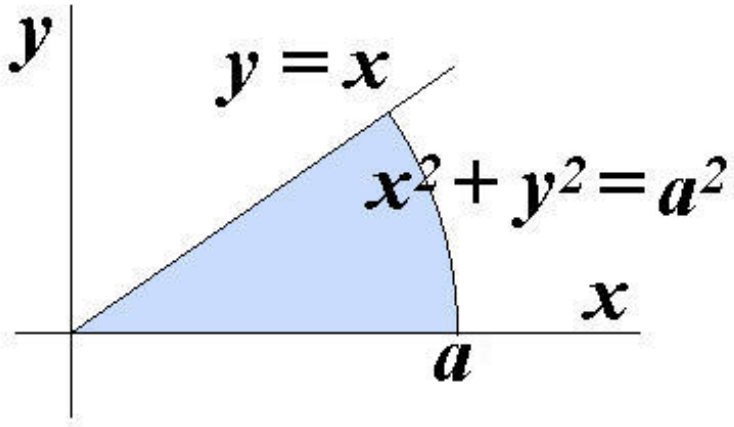


$$\text{Area}(R) = \iint_R 1 \, dA$$

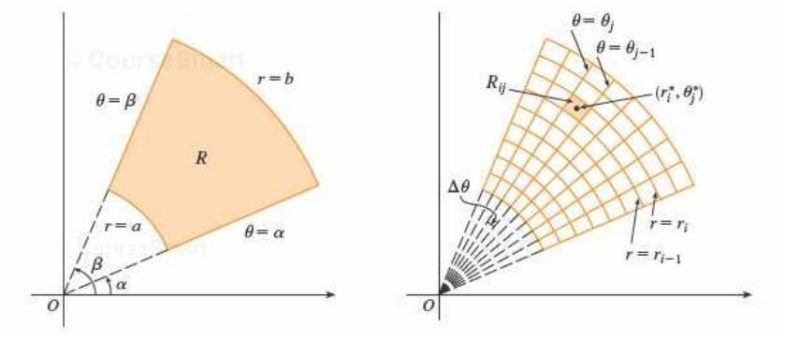


Let Ω be the sector shown below.

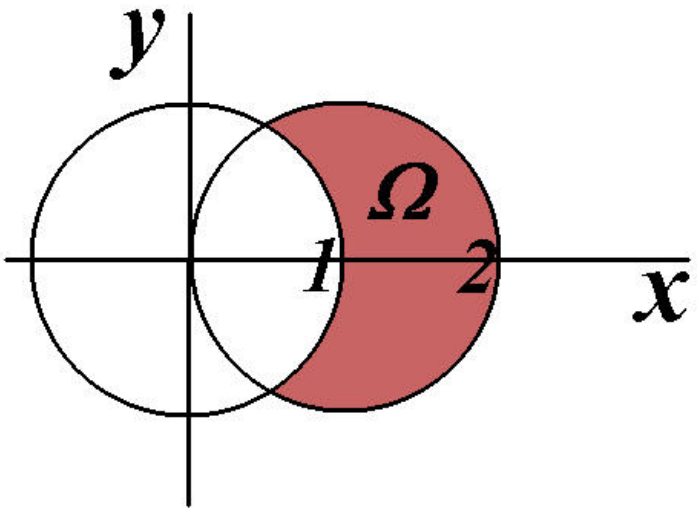
$$\text{Area}(\Omega) = \iint_{\Omega} 1 \, dA$$

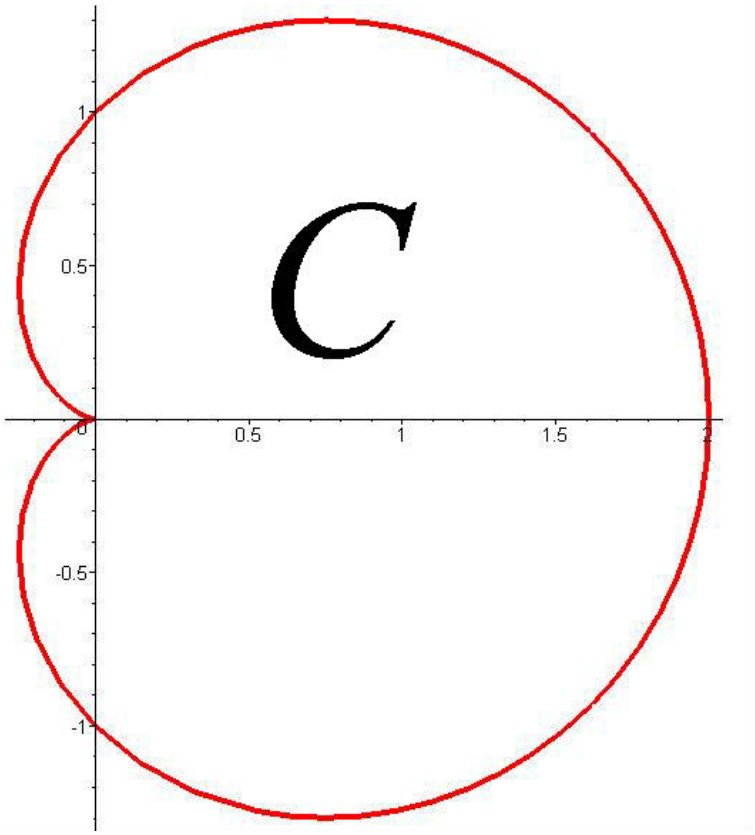


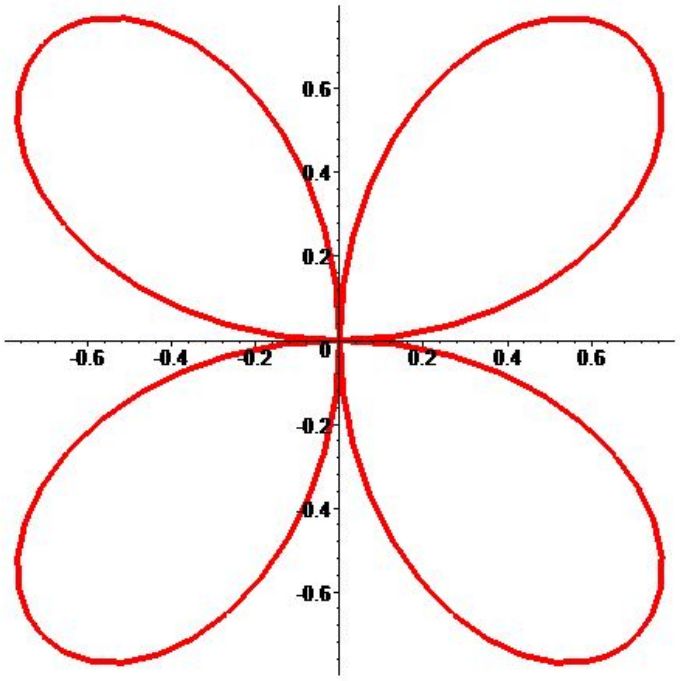
$$\text{Area}(R) = \iint_R 1\, dA = \iint_R 1\, r\, dr\, d\theta$$



$$\text{Area}(\Omega) = \iint_{\Omega} 1 \, dA$$




C
1
0.5
0
0.5
1
1.5
2
-0.5
-1


0.6
0.4
0.2
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
-0.2
-0.4
-0.6