S · T · Q · Q · S · S · D
L M M J V S D

Cálculo II

$a = 2\cos\theta$

$\frac{dr}{d\theta} = -2\operatorname{sen}\theta$

$L = \int \sqrt{(2\cos\theta)^2 + (-2\operatorname{sen}\theta)^2}\, d\theta$

$\int 4\cos^2\theta + \operatorname{sen}^2\theta\, d\theta = 2 \int d\theta = 2\cdot\pi$

$r = 2\cos\theta$

$r = \frac{2x}{r}$

$r^2 - 2x = 0$

$x^2 - 2x + y^2 = 0$

$(x-1)^2 + y^2 = 1$

Comprimento = 2π

Digitalizada com CamScanner

$b = r = 2(1 + \cos\theta)$

$\frac{dr}{d\theta} = -2\sen\theta$

$L = \int \sqrt{(2+1\cos\theta + (-2\sen\theta)^2}\, d\theta$

$\int \sqrt{4 + 8\cos\theta + 4\cos^2\theta + 4\sen^2\theta}\, d\theta$

$4.2 \int \cos\left(\frac{\theta}{2}\right) d\theta = 8\left(2\sen\left(\frac{\pi}{2}\right) - 2\sen\theta\right)$

(16)

Comprimento = 16