Figura 1

$$\int dx \int dy \int dz \, |\psi(x,y,z)|^2$$

Figura 2

$$\int dx \int dy \int dz \, |\psi(x,y,z)|^2 = \int r^2 dr \int \mathrm{d}\theta \sin\theta \int d\varphi |\psi(r,\theta,\varphi)|^2$$

Figura 3

$$\int_0^r r^2 dr \int_0^\pi d\theta \, \sin\theta \int_0^{2\pi} d\varphi \, |\psi(r,\theta,\varphi)|^2$$

Figura 4

$$\int_0^r r^2 dr \int_0^\pi d\theta \, \sin\theta \int_0^{2\pi} d\varphi \, |\psi(r)|^2 = \int_0^r r^2 |\psi(r)|^2 dr \int_0^\pi d\theta \, \sin\theta \int_0^{2\pi} d\varphi$$

Figura 5

$$4\pi \int_0^r r^2 |\psi(r)|^2 dr$$