We Revolve the region bounded by $y = x^2 + 4x + 5$, $x = 0$, $x = 3$ about the y-axis.

Shell Method:

$$2 \cdot \text{Pi} \cdot \int_0^3 x \cdot (x^2 + 4 \cdot x + 5)\ dx$$

$$\frac{315\,\pi}{2} \tag{1}$$

Disk (Washer) Method:

$$\text{Pi} \cdot \int_5^{26} \left(3^2 - (-2 + \text{sqrt}(y-1))^2\right)\ dy + 45 \cdot \text{Pi}$$

$$\frac{315\,\pi}{2} \tag{2}$$