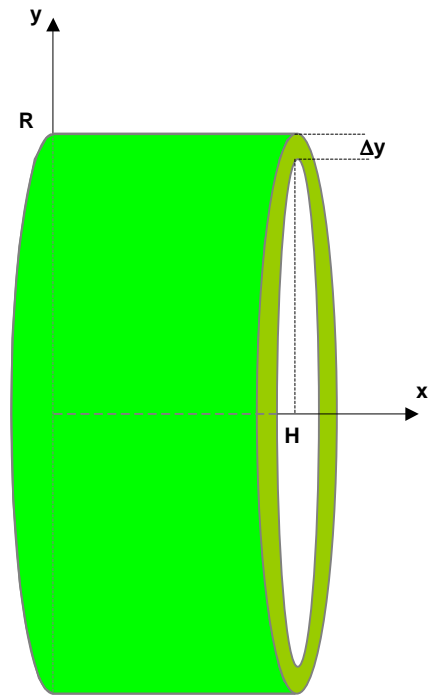
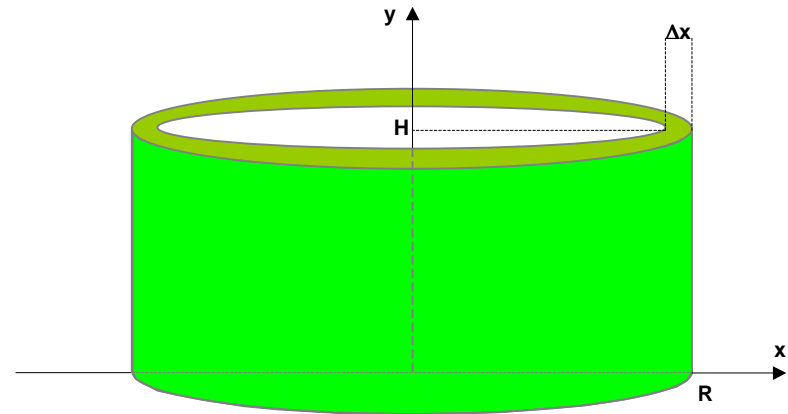


TUBOS

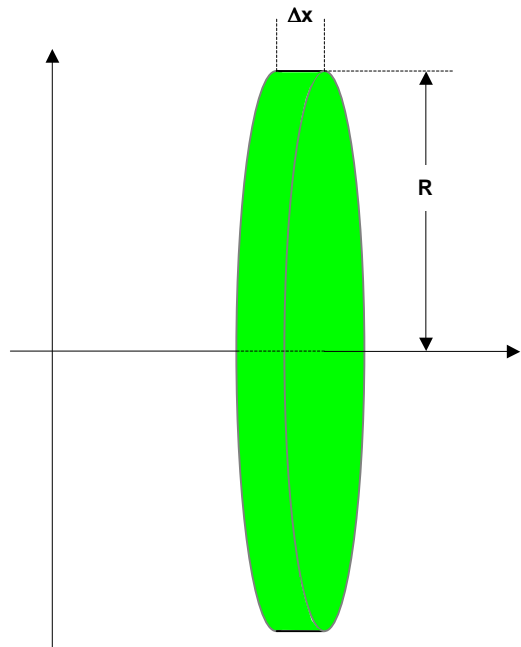


$$V_n = 2 \pi R \cdot H \cdot \Delta y$$

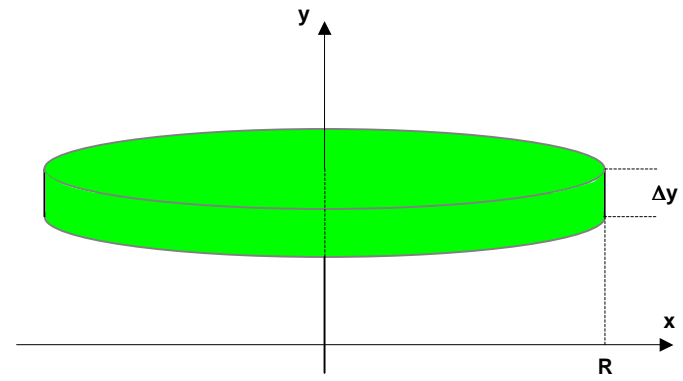


$$V_n = 2 \pi R \cdot H \cdot \Delta x$$

DISCOS

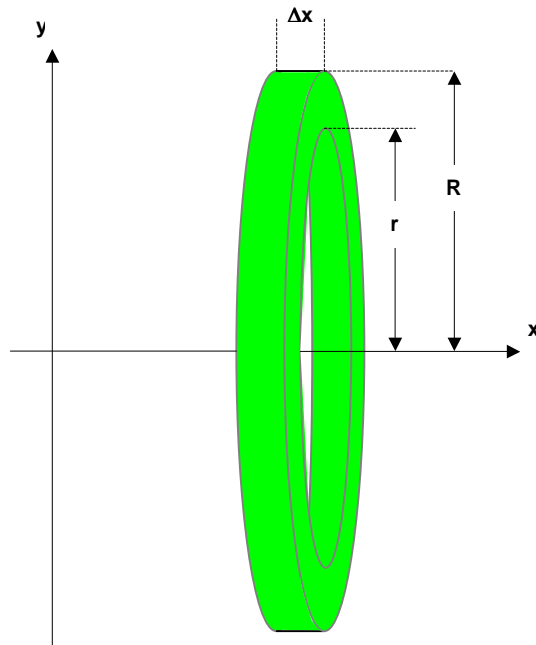


$$V = \pi R^2 \cdot \Delta x$$

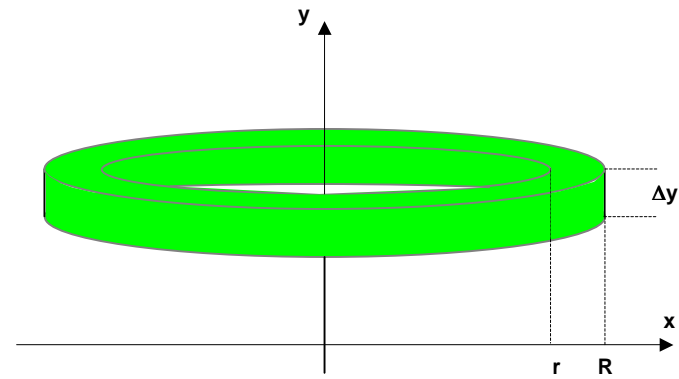


$$V = \pi R^2 \cdot \Delta y$$

ARANDELAS

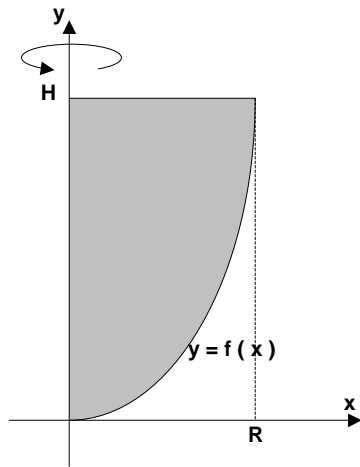


$$V = \pi (R^2 - r^2) \cdot \Delta x$$

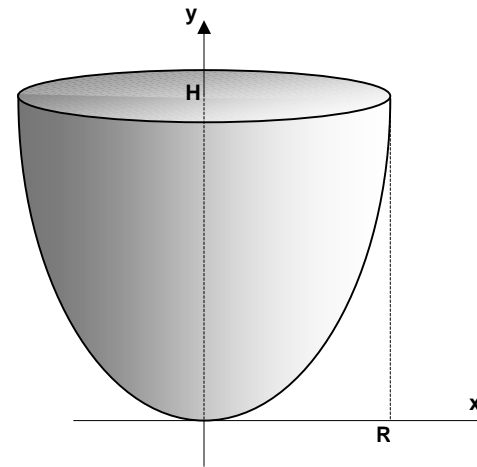


$$V = \pi (R^2 - r^2) \cdot \Delta y$$

Sólido de revolución generado por un recinto plano al girar alrededor del eje OY

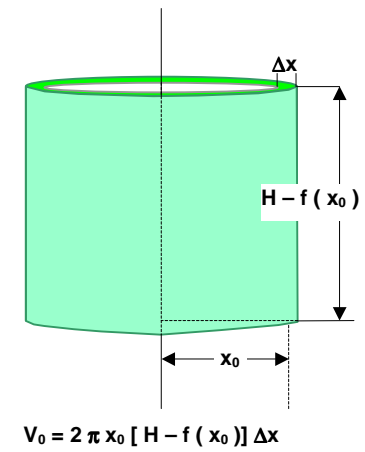
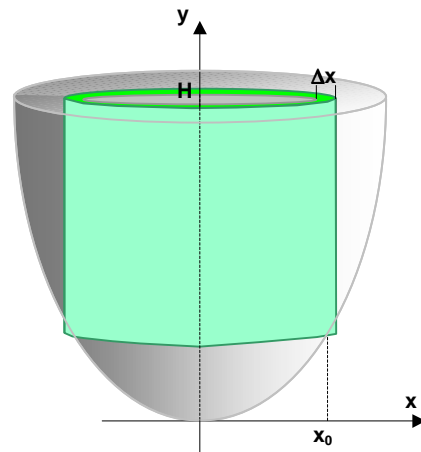
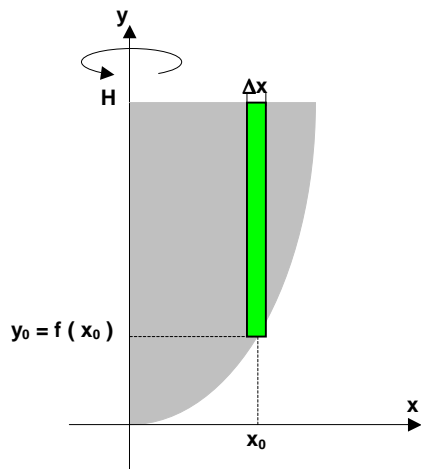


Recinto generador



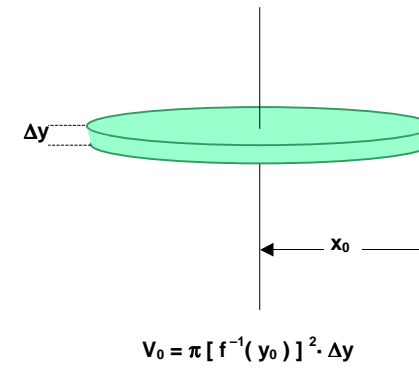
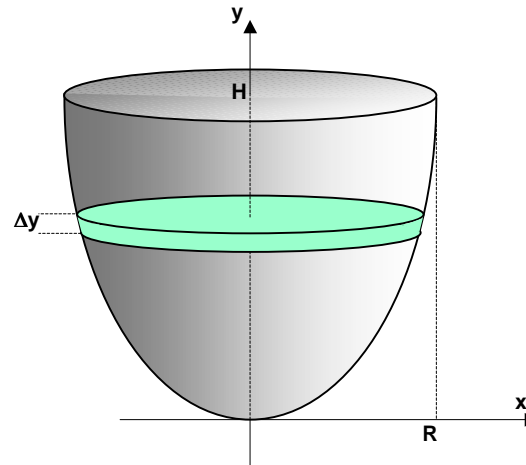
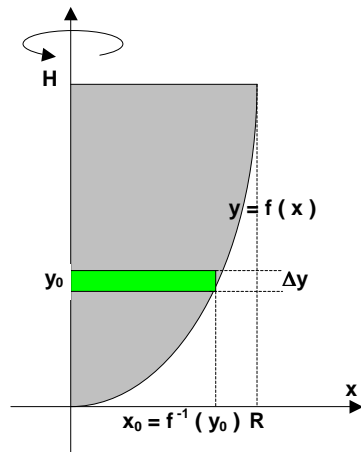
Sólido de revolución generado

Proyección sobre el eje OX:



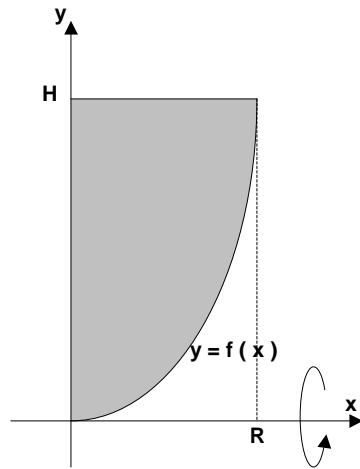
Por tubos:
$$V = \int_{x=0}^{x=R} 2 \pi x \cdot [H - f(x)] dx$$

Proyección sobre el eje OY:

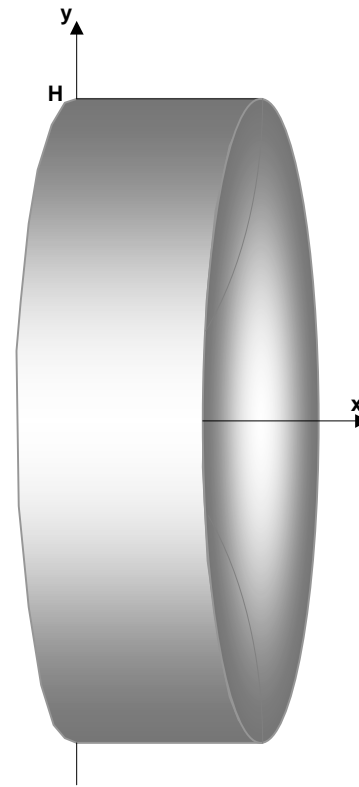


Por discos:
$$V = \int_{y=0}^{y=H} \pi [f^{-1}(y)]^2 dy$$

Sólido de revolución generado por un recinto plano al girar alrededor del eje OX

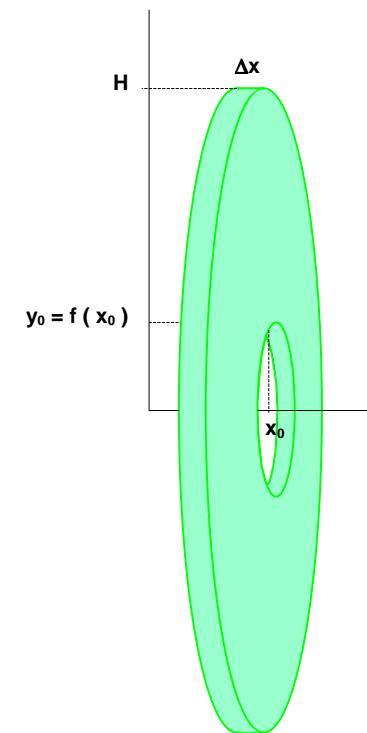
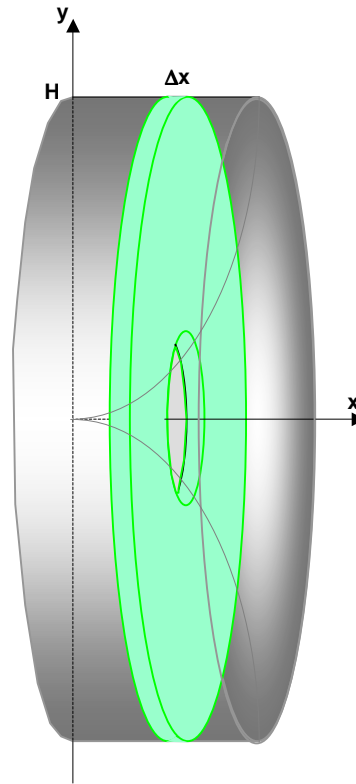
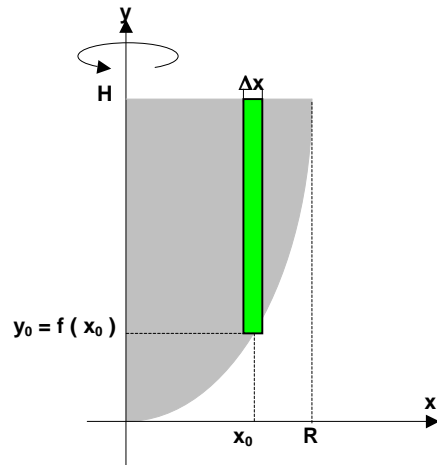


Recinto generador



Sólido de revolución generado

Proyección sobre el eje OX:

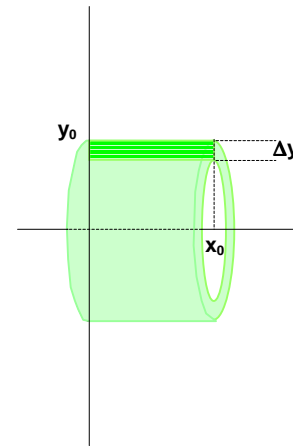
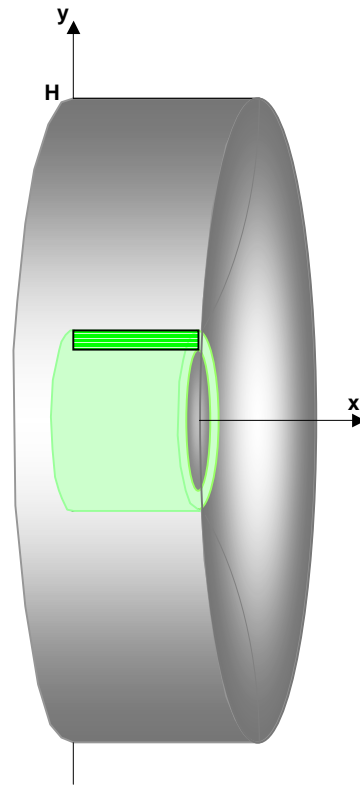
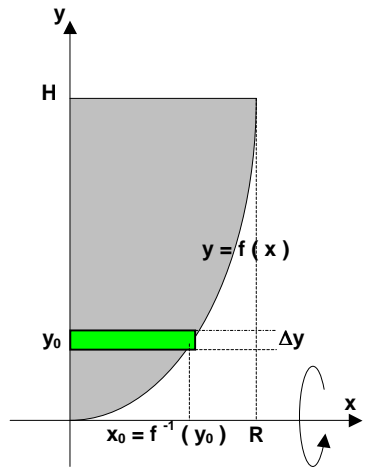


$$V_0 = \pi \cdot [H^2 - f^2(x_0)] \cdot \Delta x$$

Por arandelas:

$$V = \int_{x=0}^{x=R} \pi \cdot [H^2 - [f(x)]^2] dx$$

Proyección sobre el eje OY:



$$V_0 = 2 \pi y_0 \cdot f^{-1}(y_0) \cdot \Delta y$$

Por tubos:

$$V = \int_{y=0}^{y=H} 2 \pi y \cdot f^{-1}(y) dy$$