



$$V = \pi \int_0^8 x^2 dy = \pi \int_0^8 y^{2/3} dy = \pi \left[y^{5/3} \cdot \frac{3}{5} \right]_0^8 =$$
$$= \frac{3\pi}{5} (8^{5/3} - 0) = \frac{3\pi}{5} \cdot 2^5 = \frac{96\pi}{5}$$