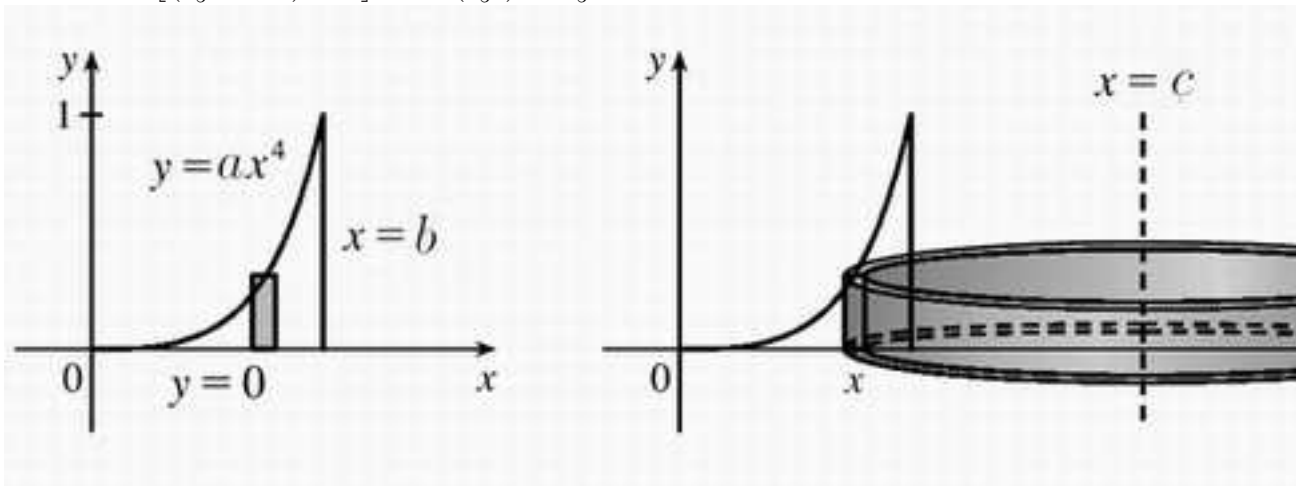


The shell has radius $4 - x$, circumference $2\pi(4 - x)$, and height $3x^4$.

$$\begin{aligned} V &= \int_0^2 2\pi(4 - x)3x^4 dx \\ &= 2\pi \int_0^2 (12x^4 - 3x^5) dx \\ &= 2\pi \left[\frac{12}{5} x^5 - \frac{1}{2} x^6 \right]_0^2 \\ &= 2\pi \left[\left(\frac{384}{5} - 32 \right) - 0 \right] = 2\pi \left(\frac{224}{5} \right) = \frac{448}{5} \pi \end{aligned}$$



$$a = 3, b = 2, c = 4$$