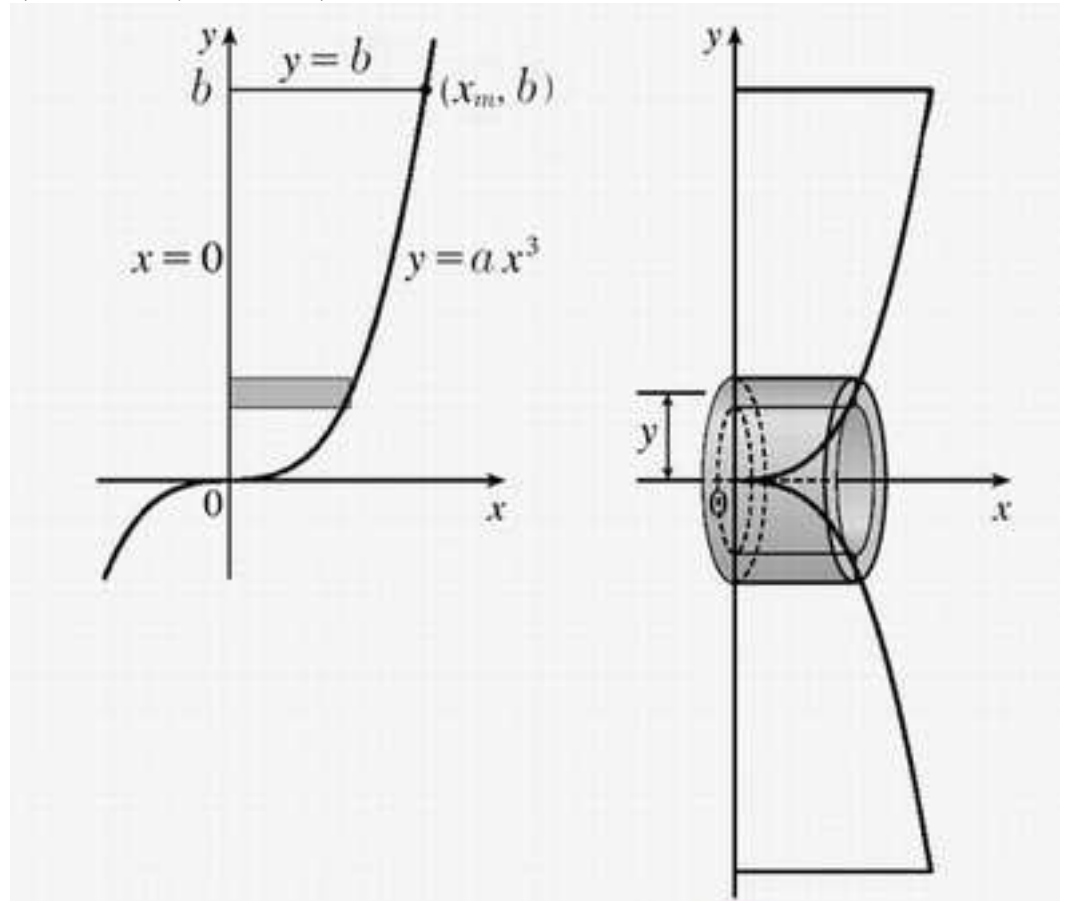


$$\begin{aligned}
 V &= 2\pi \int_0^8 [y(\sqrt[3]{y} - 0)] dy \\
 &= 2\pi \int_0^8 y^{4/3} dy = 2\pi \left[\frac{3}{7} y^{7/3} \right]_0^8 \\
 &= \frac{6}{7} (8^{7/3}) \pi = \frac{6}{7} (2^7) \pi = \frac{768}{7} \pi
 \end{aligned}$$



$$a = 1, b = 8$$