

Volume Using the Disk Method

Find the volume of the solid described in each.

1. $y = \sqrt{x}$, $x = 0$, $x = 4$, revolve about the x -axis

2. $y = \sqrt{x}$, $x = 0$, $x = 4$, revolve about $x = 4$

3. $y = x^{2/3}$, $x = 0$, $y = 1$, revolve about the y -axis

4. $y = x$, $y = 0$, $y = 4$, $x = 6$, revolve about $x = 6$

5. $y = \frac{1}{\sqrt{x+1}}$, $y = 0$, $x = 0$, $x = 3$, revolve about the x -axis