

Finding Volumes of Solids Using the Disk Method

1. Find the volume of the solid generated by revolving the region bounded by $y = \sqrt{x}$, $0 \leq x \leq 4$ and the x -axis about the x -axis.
2. Find the volume of the solid generated by revolving the region bounded by $y = \sqrt{x}$ and the lines $x = 1$ and $x = 4$ about the line $y = 1$.
3. The region between the curve $x = \frac{2}{y}$, $1 \leq y \leq 4$ and the y -axis is revolved about the y -axis to generate a solid. Find the volume.