

Volume by Shells

1. Find the volume of the solid formed by rotating about the y -axis the region in quadrant 1 bounded by $y = 2x^2 - x^3$ & the x -axis.

2. Find the volume of the solid formed by rotating about the y -axis the region bounded by $y = x$ & $y = x^2$.

a) Use Shells:

b) Use Washers:

3. Find the volume of the solid formed by rotating about the line $x = 2$ the region bounded by $y = x - x^2$ & $y = 0$.

4. Find the volume of the solid formed by rotating about the line $y = 5$ the region bounded by $x = y^2 - y - 6$ & $x = 6$.