

3. (2.5 points) The region bounded by the graphs of $y = x^2$ and $y = x + 2$ is rotated about the line $y = 4$. Find the volume of the solid that is generated.

4. (2.5 points) The 1st-quadrant region bounded by the graphs of $y = x^2$ and $y = x^5$ is rotated about the line $x = 2$. Find the volume of the solid that is generated.