1. Find the volume of the solid obtained by rotating the region bounded by $y = 2x - x^2$, $y = 0$, $x = 0$, $x = 1$ about the $y$-axis.

![Graph 1](image1.png)

2. Find the volume of the solid obtained by rotating the region bounded by $y = \frac{1}{x}$, $y = 0$, $x = 1$ and $x = 10$ about the $y$-axis.

![Graph 2](image2.png)

3. Find the volume of the solid obtained by rotating the region bounded by $y = x^2 - 4x + 5$ and $y = -x^2 + 4x - 1$ about the $y$-axis.

![Graph 3](image3.png)
4. Find the volume of the solid obtained by rotating the region bounded by $x = 6y - y^2$, $x = 0$ about the $x$-axis.

5. Find the volume of the solid obtained by rotating the region bounded by $y = 4x - x^2$, $y = 8x - 2x^2$ about the line $x = -2$. 