MA41G Volumes #5

Find the volume of the solid generated when the region between the graphs of the equations are revolved about the y-axis.

1.) $y = x$ and $y = x^2$ in the first quadrant

2.) $y = 2x - 1$, $y = -2x + 3$ and $x = 2$

3.) $y = x$, $y = -\frac{x}{2}$ and $x = 2$

4.) $y = 2x - 1$, $y = \sqrt{x}$ and $x = 0$