Exercise 1 (5 points)
Find the volume of the solid obtained by rotating the region enclosed by the curves $y = x^3$ and $y = x^2$ about the line $y = 2$.

Exercise 2 (5 points)
Find the area between the curves $y = x^2 + 1$, $y = \frac{1}{\sqrt{x}}$, $y = 2$ and $y = 3$ (show all your steps)
Exercise 1 (5 points)

Find the area between the curves $y = x^2 + 2$, $y = \frac{1}{\sqrt{x}}$, $y = 2$ and $y = 3$ (show all your steps)

Exercise 2 (5 points)

Find the volume of the solid obtained by rotating the region enclosed by the curves $y = x^3$ and $y = x^2$ about the line $y = -2$. 