Name: ______________________  ID: ___________________  Section: ______

Exercise 1 (5 points)
Find a simple formula for the area of the region enclosed by the curves $y^2 = x - 1$ and $y = x - 3$ [Do not evaluate the integral].

Exercise 2 (5 points)
Find a simple formula for the volume of the solid obtained by rotating the area enclosed by the curves $y^2 = x - 1$ and $y = x - 3$ about the line $y = 2$ [Do not evaluate the integral].
Exercise 1 (5 points)
Find a simple formula for the area of the region enclosed by the curves $y^2 = x - 2$ and $y = x - 4$ [Do not evaluate the integral].

Exercise 2 (5 points)
Find a simple formula for the volume of the solid obtained by rotating the area enclosed by the curves $y^2 = x - 2$ and $y = x - 4$ about the line $y = 2$ [Do not evaluate the integral].