Question 3: Consider the region *R* bounded by the curves y = 0, y = x-2, and y = $\sqrt{x}$ .

a). Sketch the region *R*.

b). Set up (do not evaluate) the integral for computing the volume of the solid generated by revolving *R* about the

1. x –axis
2. y-axis

b) Evaluate the second integral.

Question 5: Find the volume of the solid generated by revolving the region bounded by the graphs of the equations $y= \frac{3}{x+1 } , y=0 , x=0, and x=3 about the x-axis.$