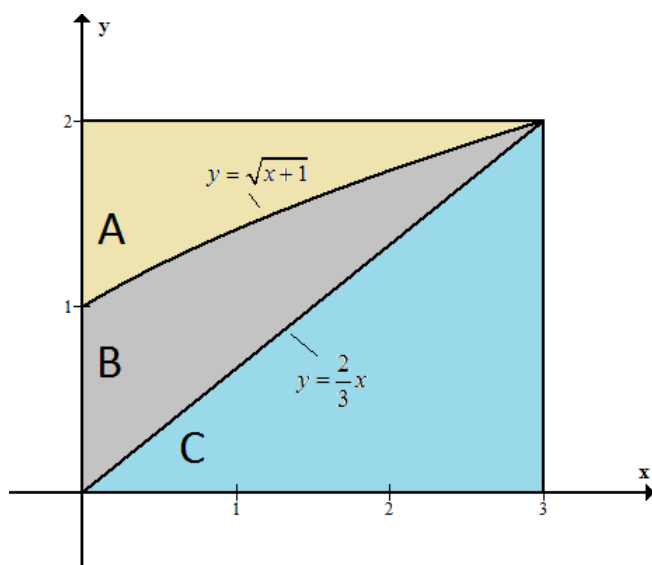


1. Use the graph below to rotate the given region about the given axis of revolution.
Draw the picture and find the area.



(a) Rotate region B about the x -axis. (Washer Method)

(b) Rotate region B about the y -axis (Using Shell Method). Hint: $\int x\sqrt{x+1} dx = \frac{2}{5}(x+1)^{5/2} + \frac{2}{3}(x+1)^{3/2}$

(c) Rotate region C about the line $y = -1$. (Washer Method)

(d) Rotate region A about the line y -axis (Disk Method).

(e) Rotate region A around the x -axis. (Shell).

(f) Rotate region C around the line $x = 3$ (Shell).