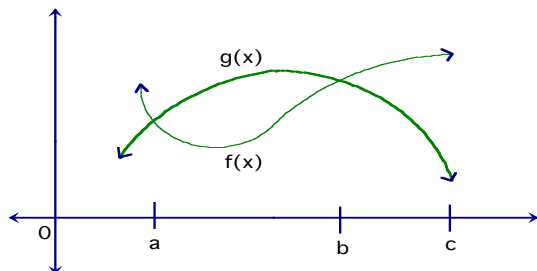


HW 7.2 Volumes Rotated about x -axis Name _____

- 1) Set up an equation that would find volume of enclosed region rotated about x -axis.



Find each volume of enclosed region rotated about the x -axis. (Show work)

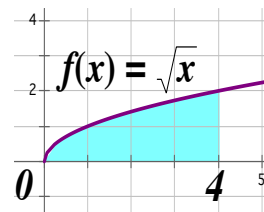
2) $f(x) = \sqrt{9-x^2}$, $g(x) = 0$ from $[0,3]$

3) $f(x) = e^x$, $g(x) = 0$ from $[1, \ln 5]$

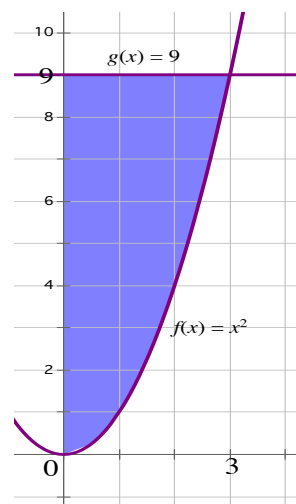
- 4) Find each volume of enclosed region rotated about the x -axis. (Show work)

$$y = \frac{1}{\sqrt{x+1}}, y = 0, x = 0, x = e-1$$

- 5) Find Volume of enclosed region between the graph of $f(x) = \sqrt{x}$ and x -axis from $[0,4]$ rotated about x -axis. (Set up and use calculator)

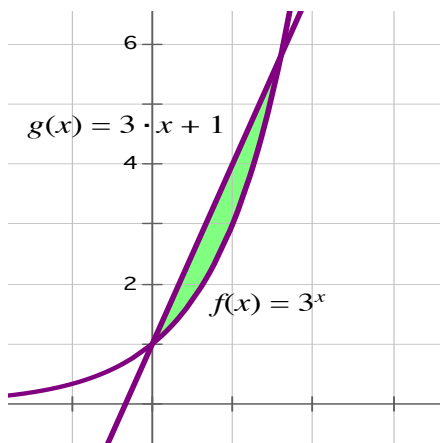


- 6) Find Volume of enclosed region between the graph of $f(x) = x^2$, $y = 9$ and y -axis from $[0,3]$ rotated about x -axis. (Set up and use calculator)



Find the volume of each enclosed region rotated about the x -axis (Set up and use calculator)

- 7) $f(x) = 3^x$ $g(x) = 3x + 1$



- 8) $y = \sqrt{x+2}$ $y = e^x$

