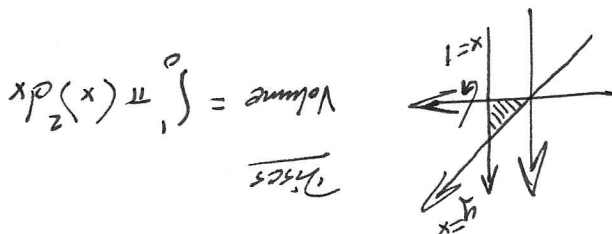


Each problem is worth 0 points. In the event of an actual quiz, you would have received warning.

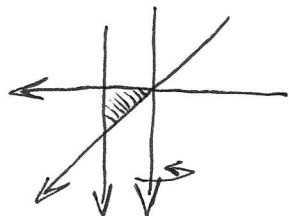
1. Let R be the region bounded between $y = x$, $x = 1$, and $y = 0$. Set up an integral for the volume obtained when R is rotated around the x -axis.



Disks

$$\text{Volume} = \int_0^1 \pi (x)^2 dx$$

2. Let R be the region bounded between $y = x$, $x = 1$, and $y = 0$. Set up an integral for the volume obtained when R is rotated around the y -axis.



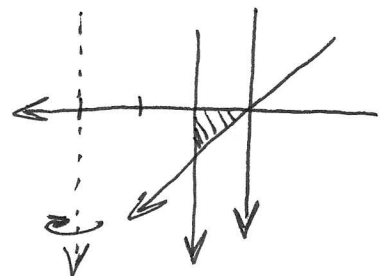
Washers

$$\text{Volume} = \pi \int_0^1 [(1)^2 - (y)^2] dy$$

Shells

$$\text{Volume} = \int_0^1 2\pi x(x) dx$$

3. Let R be the region bounded between $y = x$, $x = 1$, and $y = 0$. Set up an integral for the volume obtained when R is rotated around the x -axis.



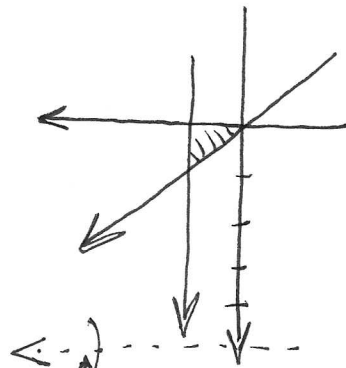
Washers

$$\text{Volume} = \pi \int_0^1 [(3-y)^2 - (2)^2] dy$$

Shells

$$\text{Volume} = \int_0^1 2\pi(3-x)x dx$$

4. Let R be the region bounded between $y = x$, $x = 1$, and $y = 0$. Set up an integral for the volume obtained when R is rotated around the axis $y = 5$.



Washers

$$\text{Volume} = \pi \int_0^1 [(5-x)^2 - (5)^2] dx$$