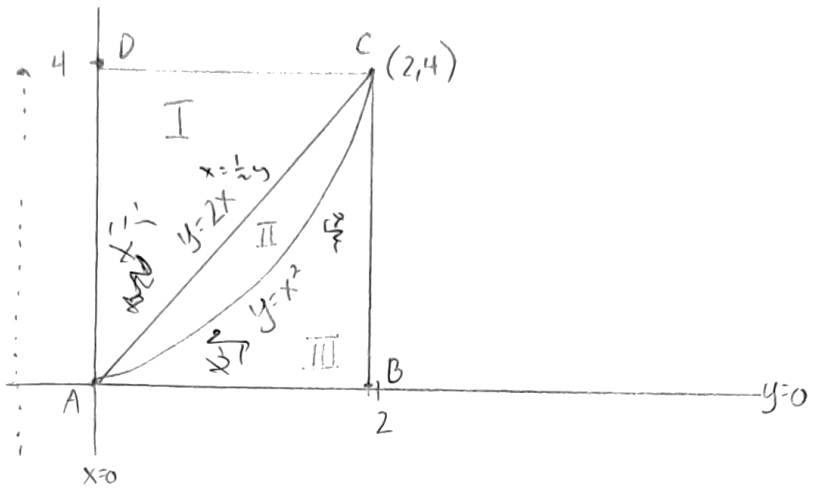
Math on 5.2



1) Rotate I about CD $\int_0^2 \pi \left(4 - 2x\right)^2 dx$

2) Rotate I about AD $\int_0^4 \pi (2x)^2 dx = \int_0^4 \pi \left(\frac{1}{2}y\right)^2 dy$

3) Rotate I about X=-1 $\int_0^4 \pi (2x+1)^2 dx - \int_0^4 \pi \, dx$

4) Rotate II about BC $\int_0^4 \left(2 - \frac{1}{2}y\right)\left(2 - \sqrt{y}\right)^2 dy$

5) Rotate II about CD $\int_0^2 \pi \left[(4-x^2)^2 - (4-2x)^2\right] dx$

6) Rotate II about X=4 $\int_0^4 \pi \left[(4-\frac{1}{2}y)^2 - (4 - y^{1/2})^2\right] dy$

7) Rotate III about AB $\int_0^2 \pi \left[(x^2)^2\right] dx$

8) Rotate III about BC $\int_0^4 \pi \left(2 - y^{1/2}\right)^2 dy$

9) Rotate III about CD $\int_0^2 \pi \left[4^2 - (4-x^2)^2\right] dx$

10) Rotate I and II about X=-2 $\int_0^4 \pi \left[\left(-2 - y^{1/2}\right)^2 - (-2)^2\right] dy$