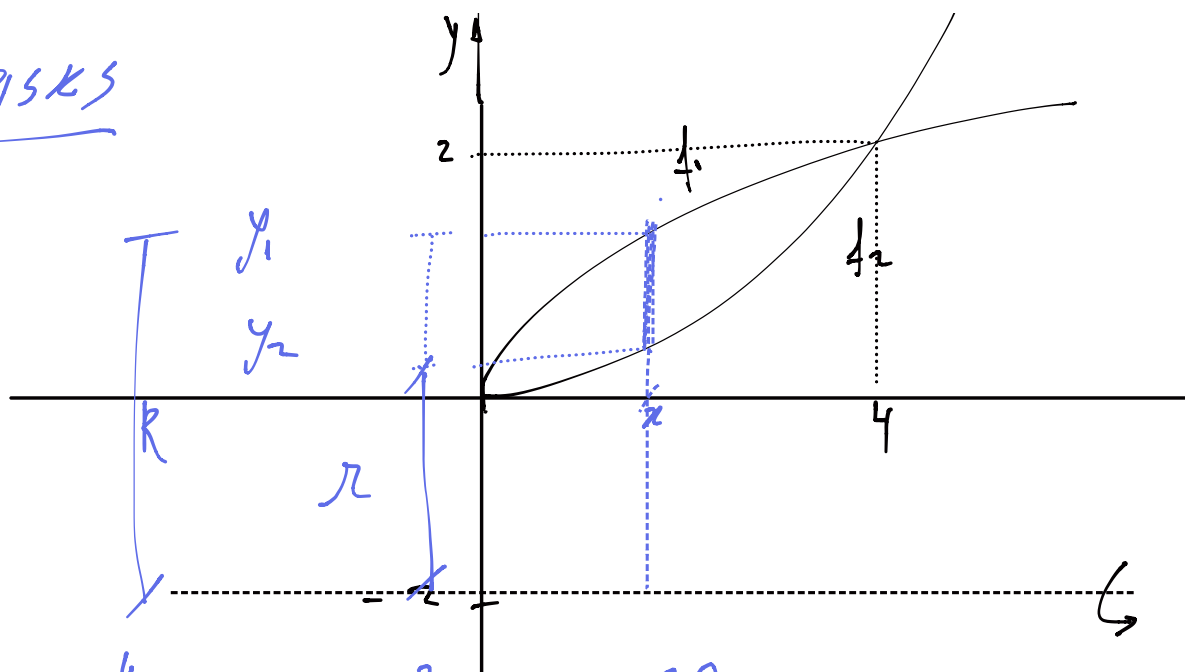


DISKS



$$\int_0^4 \pi \left[(2+y_1)^2 - (2+y_2)^2 \right] dx$$

$$\pi \int_0^4 \left[\left(2+x^{\frac{1}{2}} \right)^2 - \left(2+\frac{x^2}{8} \right)^2 \right] dx$$

$$\pi \int_0^4 \left(4 + 2 \cdot 2 \cdot x^{\frac{1}{2}} + x - 4 - 2 \cdot 2 \cdot \frac{x^2}{8} - \frac{x^4}{64} \right) dx$$

$$\pi \left[4 \cdot \frac{2}{3} x^{\frac{3}{2}} + \frac{x^2}{2} - \frac{1}{2} \cdot \frac{x^3}{3} - \frac{1}{64} \frac{x^5}{5} \right]_0^4$$

$$\pi \left(\frac{8}{3} \cdot 4^{\frac{3}{2}} + \frac{16}{2} - \frac{64}{6} - \frac{1024}{64.5} \right)$$

$$\pi \left(\frac{64}{3} + 8 - \frac{32}{3} - \frac{16}{5} \right)$$

$$\frac{\pi}{3.5} \left(64.5 + 8.3.5 - 32.5 - 16.3 \right)$$

$$\frac{\pi}{3.5} \left(2.3.2 \right)$$

$$= \frac{232\pi}{15}$$