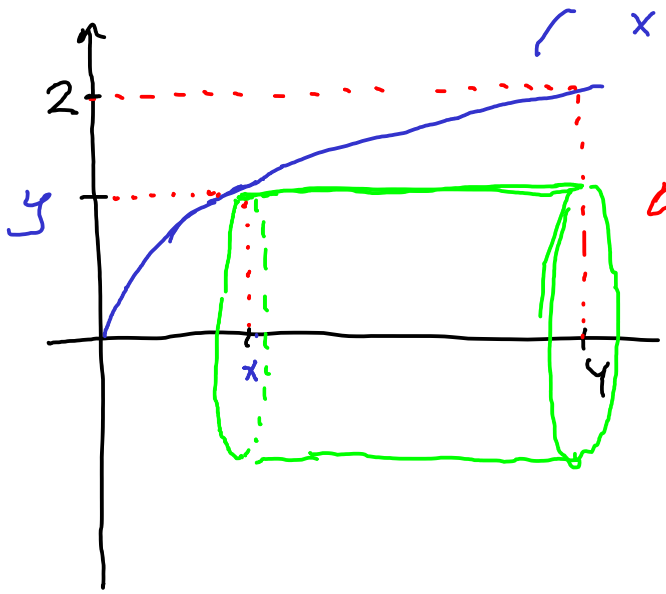
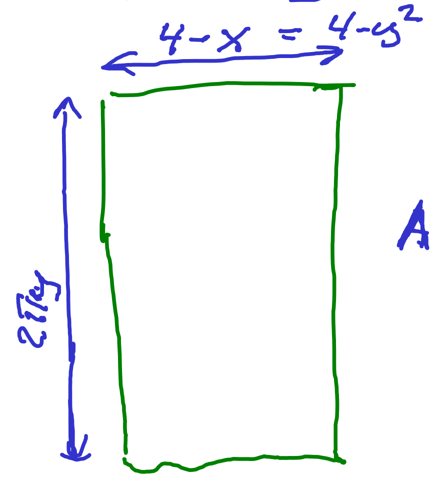
Rep A10



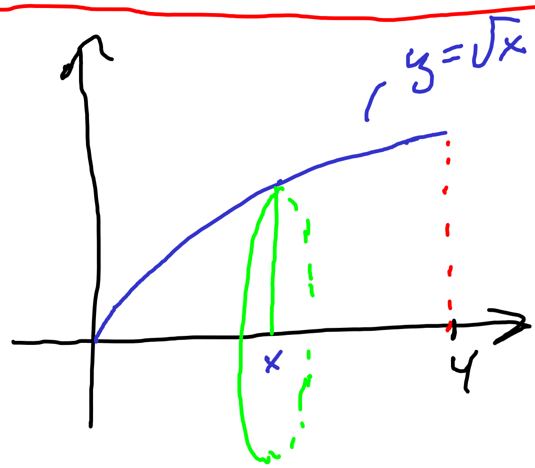
Arean av denna givet y?



$A(y) = 2\pi y(4-y^2)$

$$V = \int_0^2 A(y)\,dy = \int_0^2 2\pi y(4-y^2)\,dy = 2\pi\int_0^2 (4y-y^3)\,dy$$

$$= 2\pi\left[2y^2 - \frac{y^4}{4}\right]_0^2 = 2\pi(8-4) - 0 = 8\pi$$



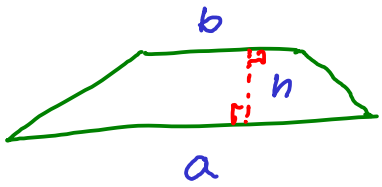
Area

$$A(x) = \pi y^2 = \pi(\sqrt{x})^2 = \pi\cdot x$$

$$V = \int_0^4 A(x)\cdot dx = \int_0^4 \pi x\,dx = \left[\pi\cdot\frac{x^2}{2}\right]_0^4$$

$$= \pi\cdot 8 - 0 = 8\pi$$

Area för parallelltrapets



$$A = \frac{h \cdot (a+b)}{2}$$