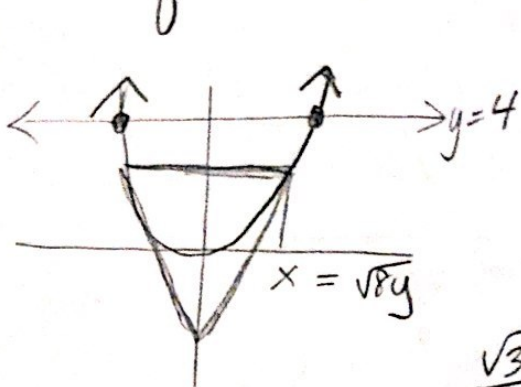


④ Base of solid bounded by $x^2 = 8y$ and $y = 4$ and each plane \perp to y -axis is equilateral Δ . Find volume.



$$y = \frac{1}{8}x^2$$

$$A = \frac{s^2\sqrt{3}}{4}$$

$$\frac{\sqrt{3}}{4} \int_0^4 (2\sqrt{8y})^2 dy$$

\perp to x -axis:

$$\frac{\sqrt{3}}{4} \int_{-4\sqrt{2}}^{4\sqrt{2}} \left(4 - \frac{x^2}{8}\right)^2 dx$$

$$4 = \frac{1}{8}x^2$$

$$32 = x^2$$

$$x = \pm 4\sqrt{2}$$