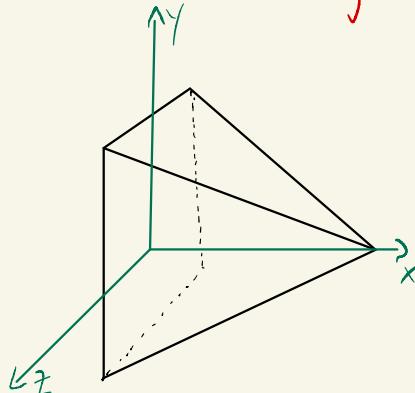
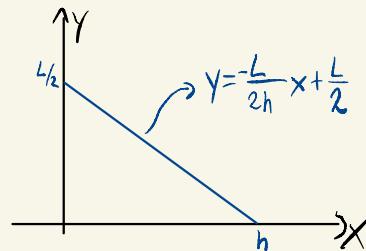


Ejercicios pendiente Clase 39

P6]



- Áreas transversales son cuadrados.
- Para determinar el lado del cuadrado, se usa una recta



Luego,

$$\begin{aligned}
 V &= \int_0^h \left(2\left\{-\frac{L}{2h}x + \frac{L}{2}\right\}\right)^2 dx \\
 &= \int_0^h \left(-\frac{L}{h}x + L\right)^2 dx \\
 &= \int_0^h \left(\frac{L^2}{h^2}x^2 - \frac{2L^2}{h}x + L^2\right) dx \\
 &= \left[\frac{L^2}{h^2} \frac{x^3}{3} - 2 \frac{L^2}{h} \cdot \frac{x^2}{2} + L^2 x \right] \Big|_0^h \\
 &= \frac{L^2}{h^2} \cdot \frac{h^3}{3} - \frac{L^2}{h} \cdot h^2 + L^2 h - 0 \\
 &= \frac{L^2}{3}h - L^2 h + L^2 h \\
 &= \frac{L^2 h}{3} //
 \end{aligned}$$