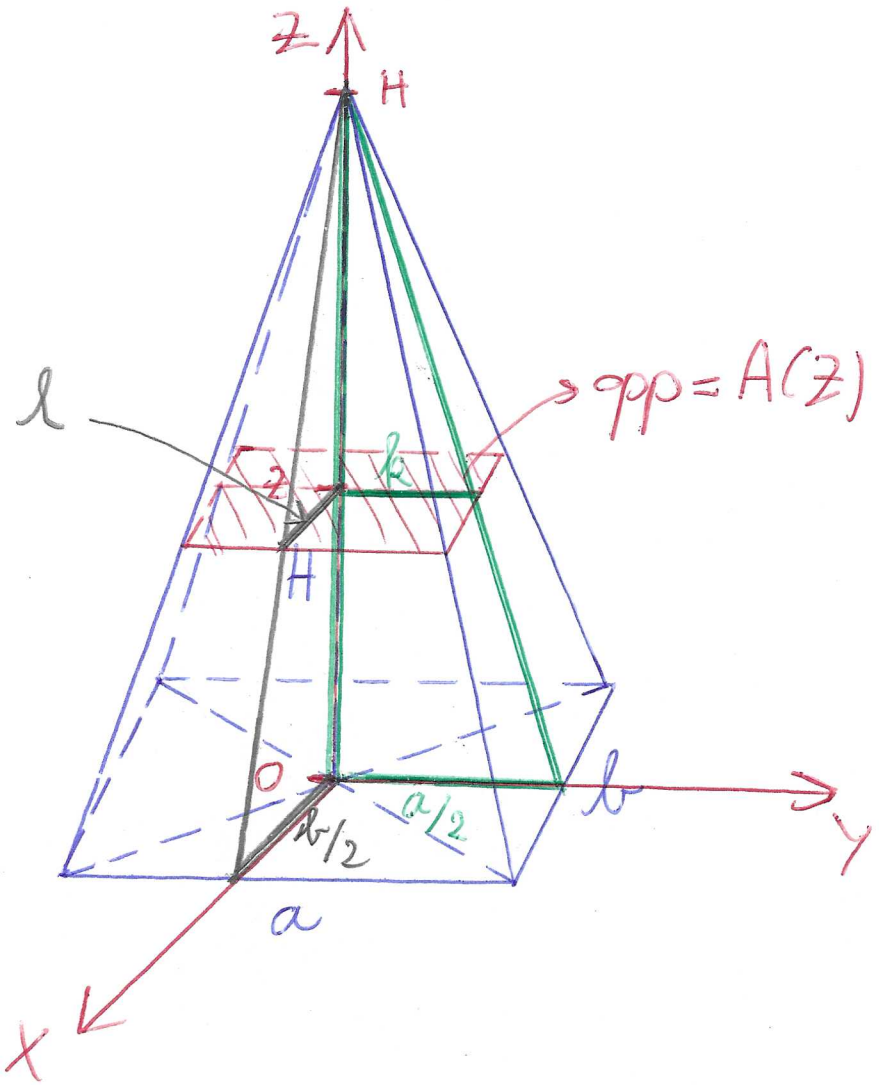

$$\frac{a/2}{H} = \frac{k}{H-z} \Rightarrow k = \frac{a}{2H} \cdot (H-z)$$

$$\frac{b/2}{H} = \frac{l}{H-z} \Rightarrow l = \frac{b}{2H} \cdot (H-z)$$

$$A(z) = 2k \cdot 2l = 4 \cdot k \cdot l = \frac{a \cdot b}{H^2} \cdot (H-z)^2$$

$$V = \int_0^H \frac{a \cdot b}{H^2} \cdot (H-z)^2 \cdot dz = \frac{1}{3} \cdot a \cdot b \cdot H$$