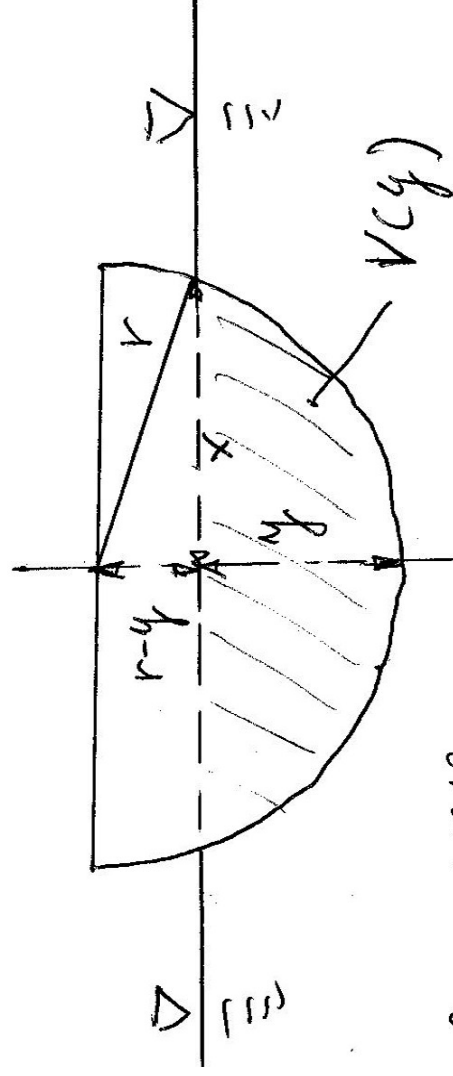


VOLUMEN HALBKUGEL UNTER WASSER



PYTHAGORAS

$$(r-y)^2 + x^2 = r^2$$

$$r^2 - 2ry + y^2 + x^2 = r^2$$

$$x^2 = 2r \cdot y - y^2$$

$$dV = x^2 \cdot \pi \cdot dy$$

$$dV = \pi (2ry - y^2) \cdot dy$$

$$V(h) = \pi \int_0^h (2r \cdot y - y^2) \cdot dy$$