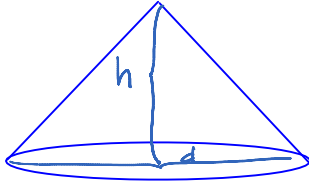


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$$\frac{dV}{dt} = 0,4 \frac{\text{m}^3}{\text{s}} \quad \text{bildar kon}$$

$$d = 2h$$

$$r = h$$



$$V = \frac{\pi r^2 h}{3} = \frac{\pi h^2 \cdot h}{3} = \frac{\pi h^3}{3}$$

$$\frac{dV}{dh} = \frac{3\pi h^2}{3} = \pi h^2$$

$$\frac{dV}{dt} = \frac{dV}{dh} \cdot \left(\frac{dh}{dt} \right)$$

$$0,4 = \pi h^2 \cdot \frac{dh}{dt}$$

$$0,4 = \pi \cdot 2^2 \cdot \frac{dh}{dt}$$

$$\frac{dh}{dt} = \frac{0,4}{\pi \cdot 4} = 0,0318 \dots \text{ m/s} \approx 3,2 \text{ cm/s}$$