№3.

$$\iiint \pi x^2 \cdot z \, dx\,dy\,dz = \int_{-h}^{h} dx \int_{-h}^{h} dy \int_{0}^{h} \pi x^2 z \, dz =$$

$$= \int_{-h}^{h} dx \int_{-h}^{h} dy \, \frac{\pi h^2 x^2}{2} =$$

$$= \int_{-h}^{h} dx \, \frac{\pi h^3 x^2 y \cdot 2}{2} = \underline{2h^6}$$