

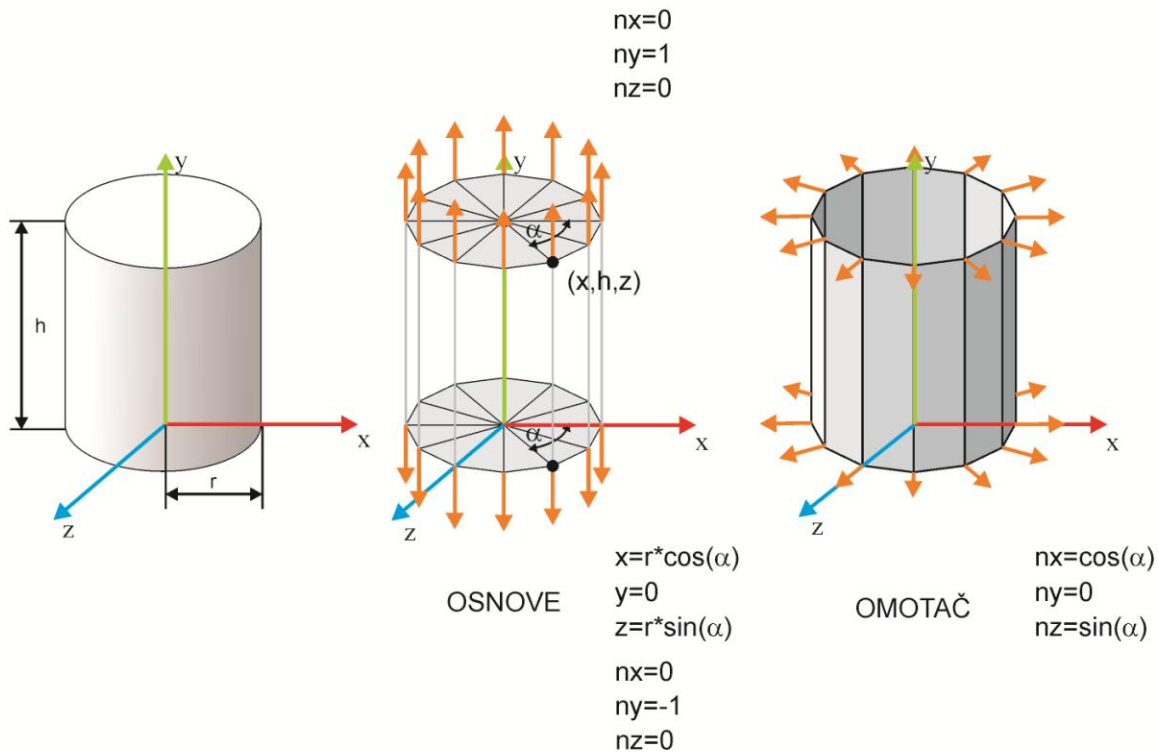
Računarska grafika

(2OER7O02)

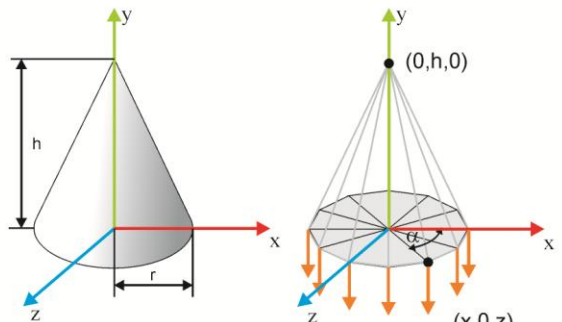
Izračunavanje normala kod 3d geometrijskih tela



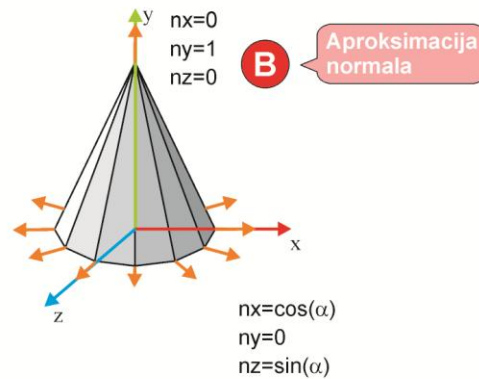
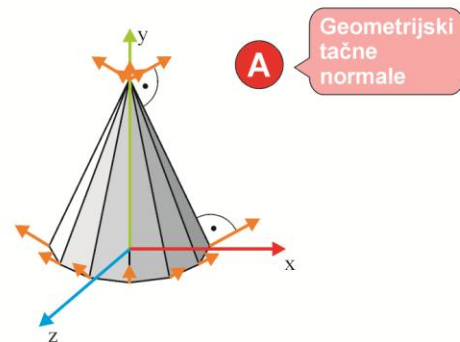
CILINDAR



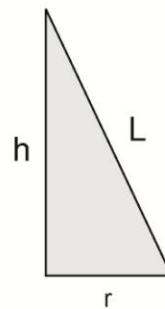
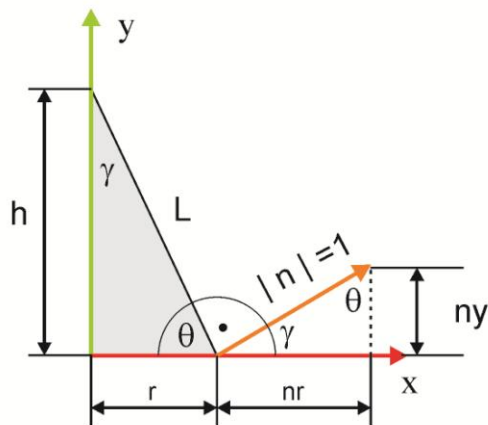
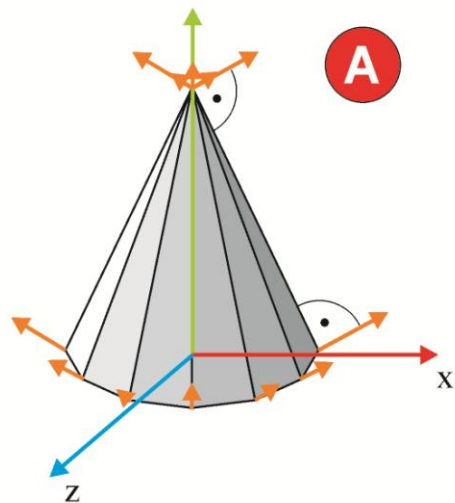
KUPA



$$\begin{aligned}x &= r \cdot \cos(\alpha) \\y &= 0 \\z &= r \cdot \sin(\alpha) \\n_x &= 0 \\n_y &= -1 \\n_z &= 0\end{aligned}$$

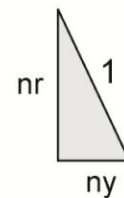


KUPA



$$ny = r/L$$

$$nr = h/L$$

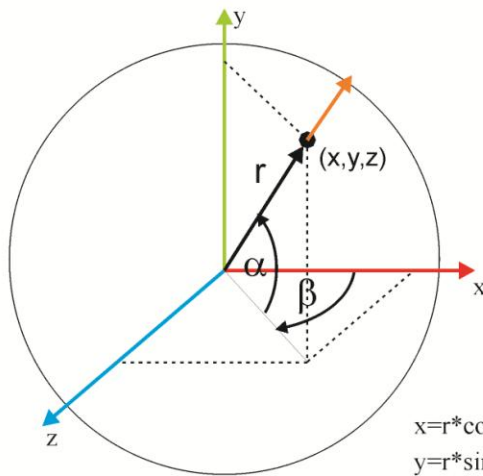
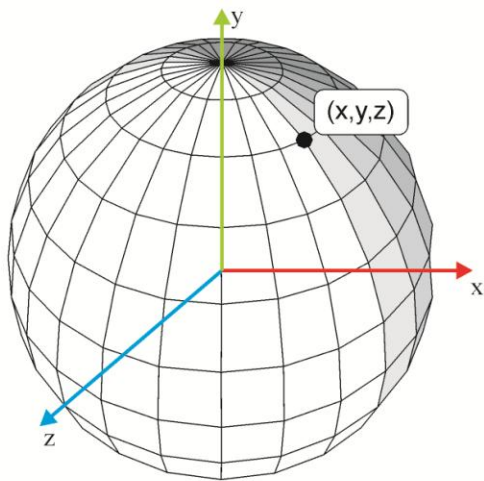


$$nx = nr \cdot \cos(\alpha)$$

$$ny = r/L$$

$$nz = nr \cdot \sin(\alpha)$$

SFERA



$$x = r \cdot \cos(\alpha) \cdot \cos(\beta)$$

$$y = r \cdot \sin(\alpha)$$

$$z = r \cdot \cos(\alpha) \cdot \sin(\beta)$$

$$n_x = x/r = \cos(\alpha) \cdot \cos(\beta)$$

$$n_y = y/r = \sin(\alpha)$$

$$n_z = z/r = \cos(\alpha) \cdot \sin(\beta)$$