

# MATEMATIKA U ARHITEKTURI 2

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## PROCES DOBIJANJA POVRŠI U PROSTORU

$$\begin{aligned}x(u,v) &= 10 * u \\ y(u,v) &= 3.5 * \cos(v) - 2 * \cos(u) * \sin(u) \\ z(u,v) &= 4 * \sin(u) * \cos(v)\end{aligned}$$

\*Promena opcije scale po osama (formula ostaje nepromenjena):

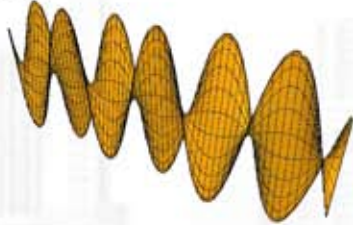
Skaliranje po X-osi:

$$\begin{aligned}\text{scaleX: } &10 \\ \text{scaleY: } &1 \\ \text{scaleZ: } &1\end{aligned}$$



Skaliranje po Y-osi:

$$\begin{aligned}\text{scaleX: } &1 \\ \text{scaleY: } &10 \\ \text{scaleZ: } &1\end{aligned}$$



Skaliranje po Z-osi:

$$\begin{aligned}\text{scaleX: } &1 \\ \text{scaleY: } &1 \\ \text{scaleZ: } &10\end{aligned}$$

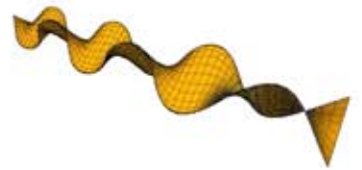


$$\begin{aligned}\text{scaleX: } &1 \\ \text{scaleY: } &10 \\ \text{scaleZ: } &10\end{aligned}$$

\*Fiksne vrednosti opcije scale, promena u formuli:

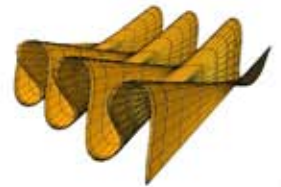
Promena u vrednosti početnog člana ose X:

$$\begin{aligned}x(u,v) &= 30 * u \\ y(u,v) &= 3.5 * \cos(v) - 2 * \cos(u) * \sin(u) \\ z(u,v) &= 4 * \sin(u) * \cos(v)\end{aligned}$$



Promena u vrednosti početnog člana ose Y:

$$\begin{aligned}x(u,v) &= 10 * u \\ y(u,v) &= 10 * \cos(v) - 2 * \cos(u) * \sin(u) \\ z(u,v) &= 4 * \sin(u) * \cos(v)\end{aligned}$$



Promena u vrednosti početnog člana ose Z:

$$\begin{aligned}x(u,v) &= 10 * u \\ y(u,v) &= 3.5 * \cos(v) - 2 * \cos(u) * \sin(u) \\ z(u,v) &= 10 * \sin(u) * \cos(v)\end{aligned}$$



\*Formula odabrane površi

$$\begin{aligned}x(u,v) &= 10 * u \\ y(u,v) &= 3.5 * \cos(v) - 2 * \cos(u) * \sin(u) \\ z(u,v) &= 4 * \sin(u) * \cos(v)\end{aligned}$$

$$\begin{aligned}\text{scaleX: } &1 \\ \text{scaleY: } &10 \\ \text{scaleZ: } &10\end{aligned}$$

$$\begin{aligned}U_{\max} &10 \\ U_{\min} &-10 \\ U_{\text{dens}} &70\end{aligned}$$

$$\begin{aligned}V_{\max} &10 \\ V_{\min} &-10 \\ V_{\text{dens}} &70\end{aligned}$$

