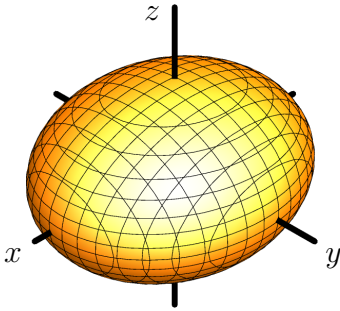


Kvadriky v \mathbb{R}^3 v základní poloze (v kanonickém tvaru)

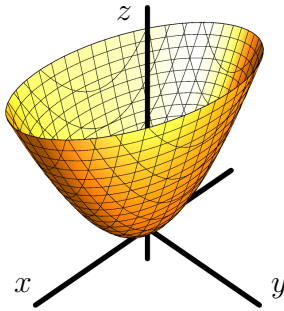
elipsoid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$$



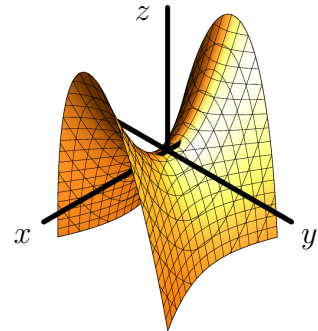
eliptický paraboloid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} - z = 0$$



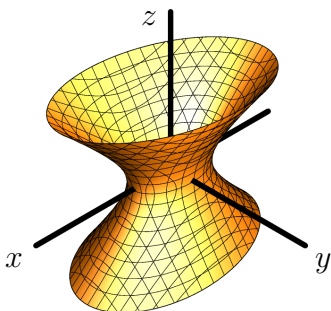
hyperbolický paraboloid

$$\frac{x^2}{a^2} - \frac{y^2}{b^2} - z = 0$$



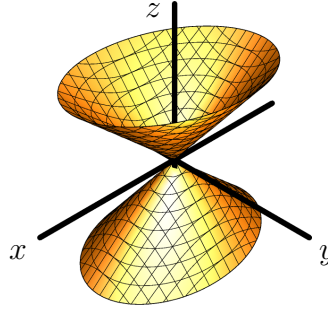
jednodílný hyperboloid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1$$



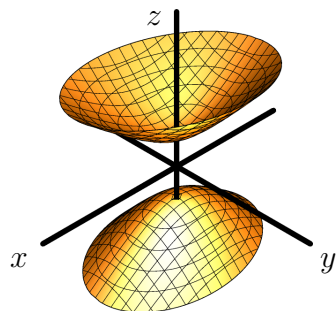
kužel

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 0$$



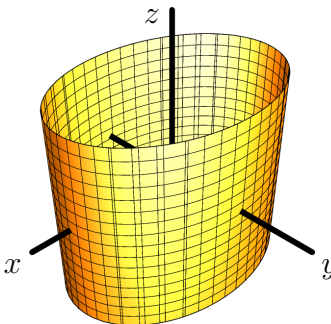
dvoudílný hyperboloid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = -1$$



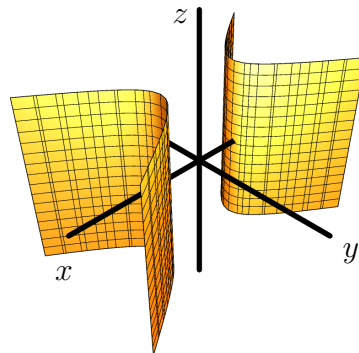
eliptický válec

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$



hyperbolický válec

$$\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$$



parabolický válec

$$y^2 + 2ax = 0$$

