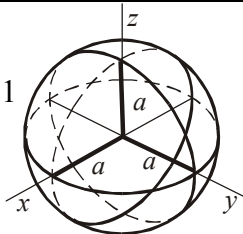


1. Guľová plocha:

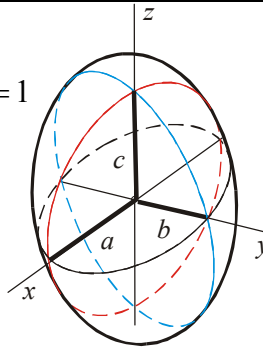
$$\frac{x^2}{a^2} + \frac{y^2}{a^2} + \frac{z^2}{a^2} = 1$$



$$x^2 + y^2 + z^2 = a^2$$

2. Elipsoid:

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



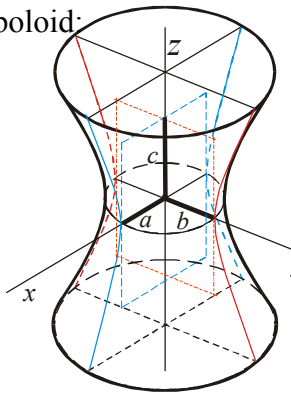
3. Jednodielny hyperboloid:

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

os z:

v rovnici pri premennej z
je znamienko '-'

Pravá strana rovnice '+1'
určí typ hyperboloidu:
jednodielny



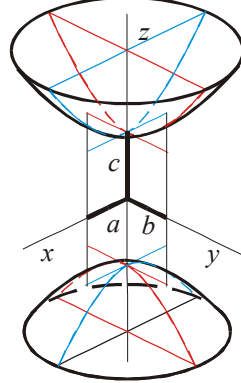
4. Dvojdielny hyperboloid:

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

os z:

v rovnici pri premennej z
je znamienko '-'

Pravá strana rovnice '-1'
určí typ hyperboloidu:
dvojdielny



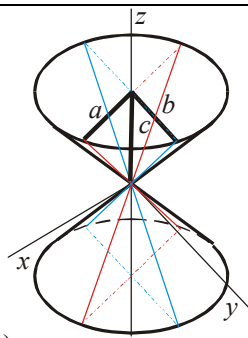
5. Kužeľová plocha:

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

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

vzhľadom na os z

v rovnici nie je absolútny člen
(porovnaj s rovnicou elipsoidu)



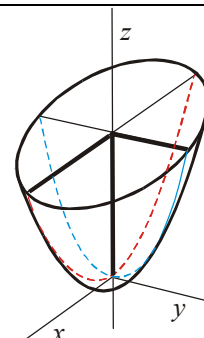
6. Eliptický paraboloid:

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

$$\frac{x^2}{p} + \frac{y^2}{q} = 2z$$

os z:

v rovnici premenná z má
exponent '1'

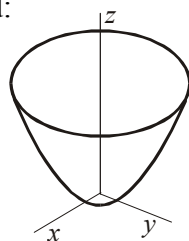


7. Rotačný paraboloid:

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

os z:

v rovnici premenná z má
exponent '1'



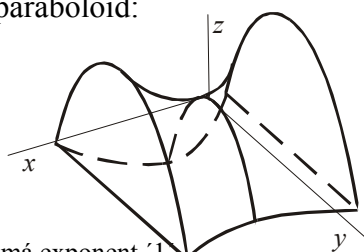
8. Hyperbolický paraboloid:

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

$$\frac{x^2}{p} - \frac{y^2}{q} = 2z$$

os z:

v rovnici premenná z má exponent '1'

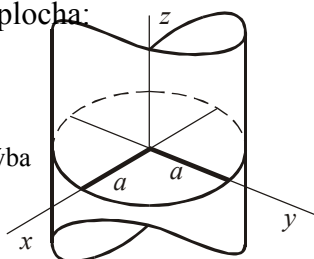


9. Rotačná valcová plocha:

$$x^2 + y^2 = a^2$$

s osou z:

v rovnici premenná z chýba

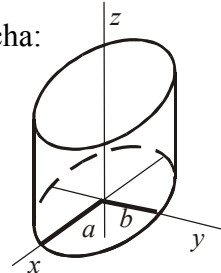


10. Eliptická valcová plocha:

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

s osou z:

v rovnici premenná z chýba

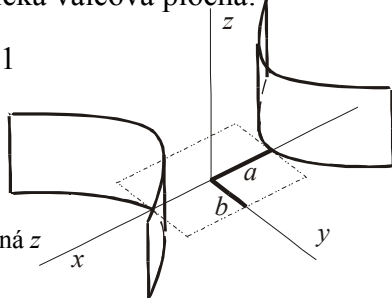


11. Hyperbolická valcová plocha:

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

s osou z:

v rovnici premenná z
nie je



12. Parabolická valcová plocha:

$$y^2 = 2px$$

s osou z:

v rovnici premenná z nie je

