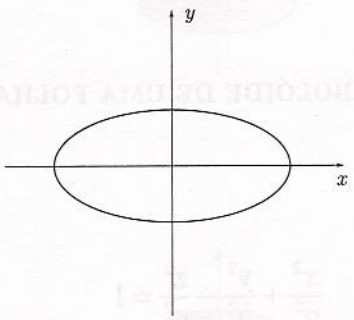
Apêndice E

Cónicas

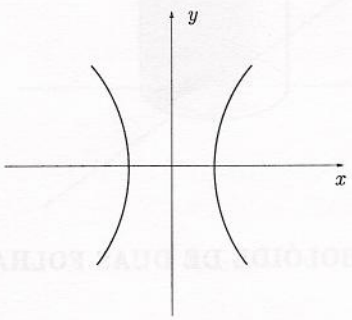
ELIPSE

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



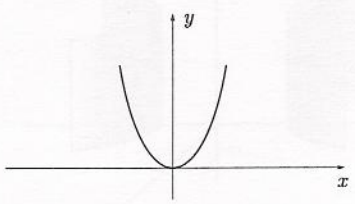
HIPÉRBOLE

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



PARÁBOLA

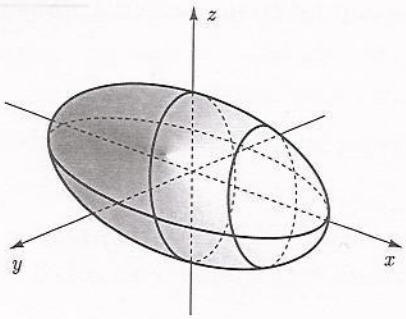
$$x^2 = ay, \quad a > 0$$



Quádricas

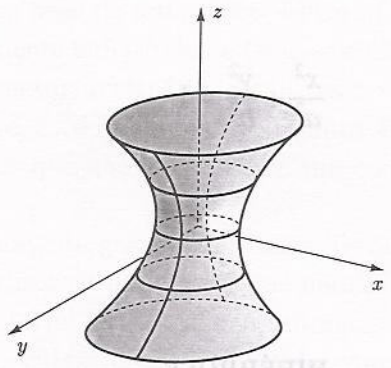
ELIPSÓIDE

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



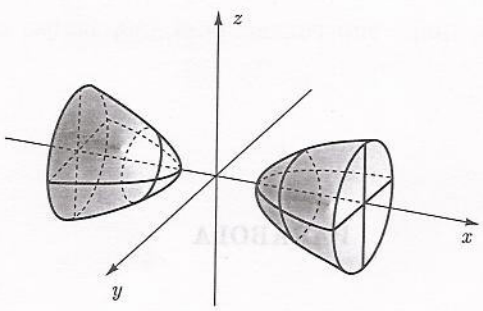
HIPERBOLÓIDE DE UMA FOLHA

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



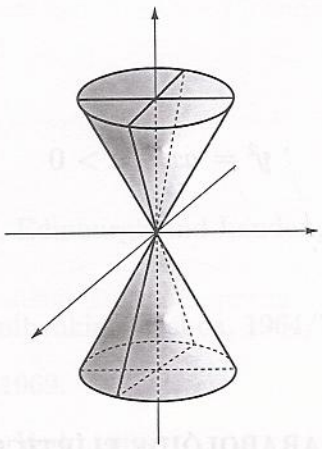
HIPERBOLÓIDE DE DUAS FOLHAS

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



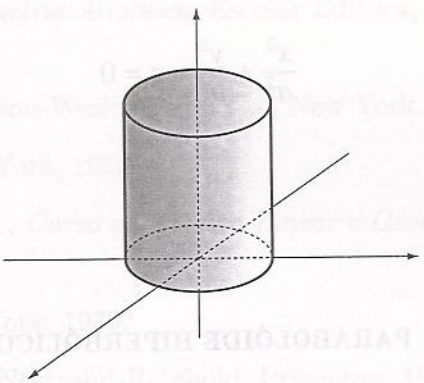
SUPERFÍCIE CÓNICA

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



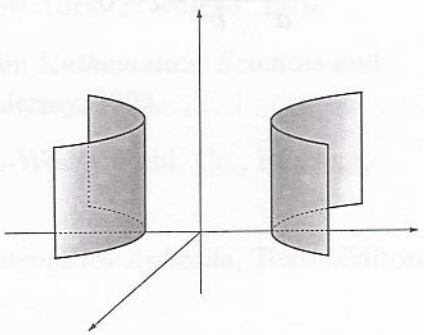
CILINDRO ELÍPTICO

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



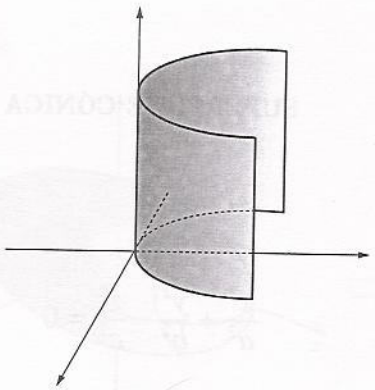
CILINDRO HIPERBÓLICO

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



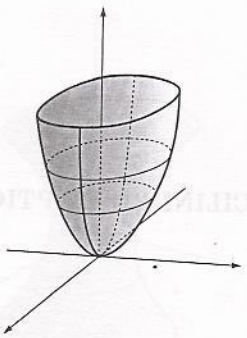
CILINDRO PARABÓLICO

$$y^2 = ax, \quad a > 0$$



PARABOLÓIDE ELÍPTICO

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



PARABOLÓIDE HIPERBÓLICO

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