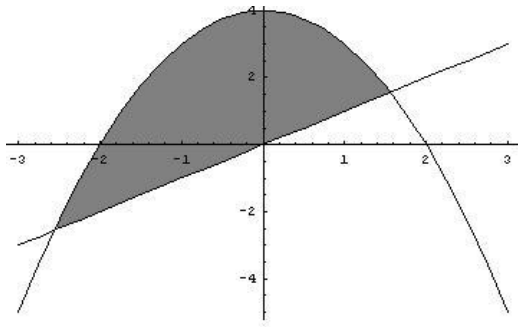
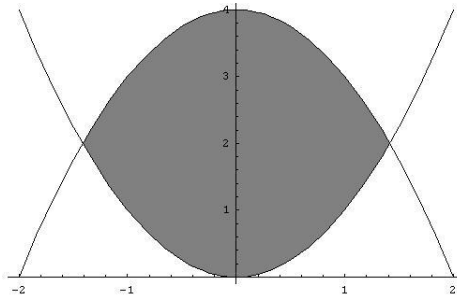


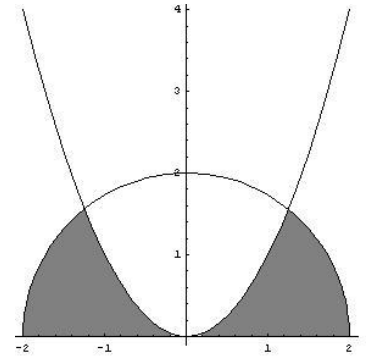
1. Μερικά χωρία του \mathbb{R}^2 που περιγράφονται από ανισότητες



$$x \leq y \leq 4 - x^2$$

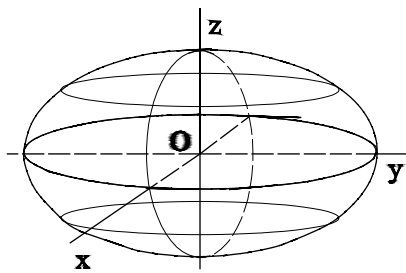


$$x^2 \leq y \leq 4 - x^2$$

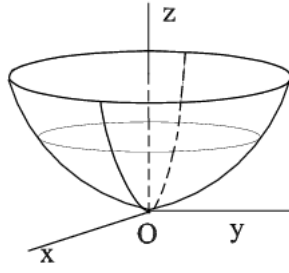


$$x^2 + y^2 \leq 1, y \leq x^2, y \geq 0$$

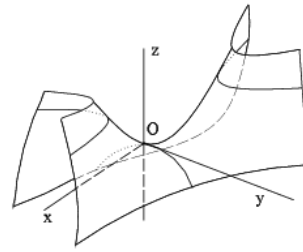
2. Μερικές βασικές Επιφάνειες 2^{ου} βαθμού:



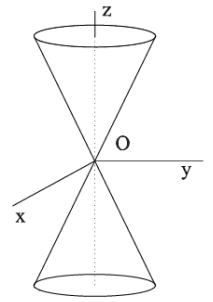
Ελλειψοειδές: $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$



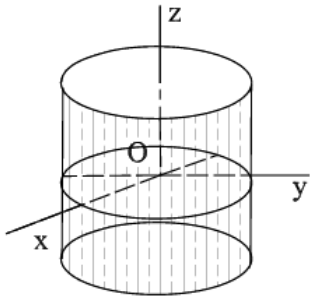
Παραβολοειδές: $z = \frac{x^2}{a^2} + \frac{y^2}{b^2}$



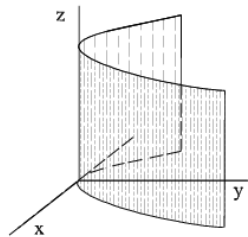
Υπερβ/κό Παραβ/δές $z = \frac{x^2}{a^2} - \frac{y^2}{b^2}$



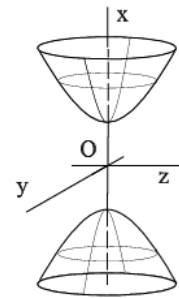
Κώνος $z^2 = \frac{x^2}{a^2} + \frac{y^2}{b^2}$



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

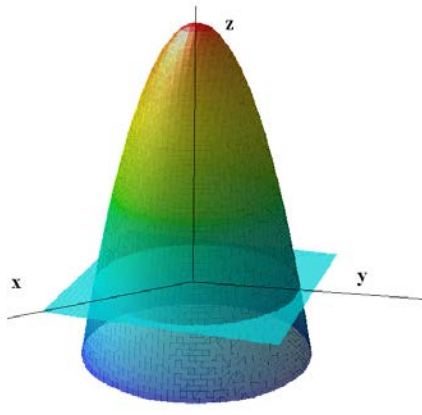


Παραβ/κός κύλινδρος $y = px^2$

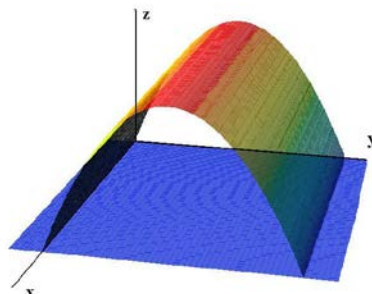


Δίχονο υπερβολοειδές: $\frac{x^2}{a^2} - \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1$

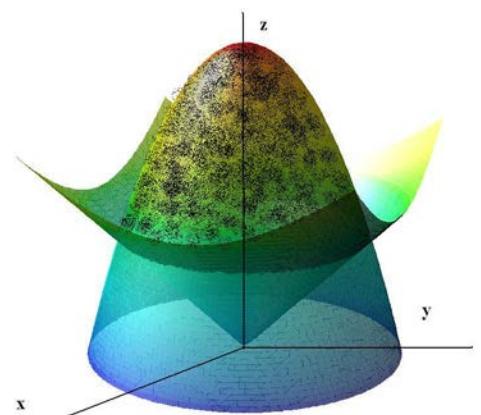
3. Μερικά χωρία του \mathbb{R}^3 που περιγράφονται με ανισότητες:



$$0 \leq z \leq 9 - (x^2 + y^2)$$



$$0 \leq z \leq 1 - (y-1)^2$$



$$\sqrt{x^2 + y^2} \leq z \leq 4 - (x^2 + y^2)$$