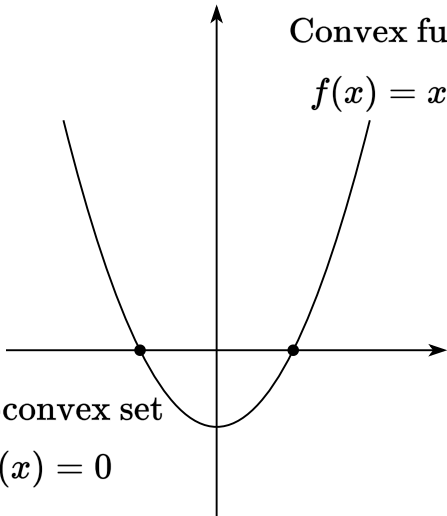


Convex function

$$f(x) = x^2 - 1$$

Non-convex set

$$f(x) = 0$$


The figure shows a Cartesian coordinate system with a vertical y-axis and a horizontal x-axis. A parabola, representing the function $f(x) = x^2 - 1$, is plotted. The parabola opens upwards, with its vertex at $(0, -1)$. It intersects the x-axis at two points, $(-1, 0)$ and $(1, 0)$, which are marked with black dots. The region above the parabola is labeled 'Convex function'. The segment of the x-axis between the two dots is labeled 'Non-convex set'.