

Parabola

A *parabola* is a type of [conic section](#). It can be described algebraically by an equation of the form $y = ax^2 + bx + c$ (a, b, c constants, a nonzero).

The path of a thrown object is a parabola.

A parabola has an *axis* (the line of symmetry of the curve) and a [focus](#) on the axis. For the parabola with equation $y = x^2/4a$, its axis is $x = 0$ and its focus is at $(0, a)$.

Light travelling towards a parabolic mirror parallel to its axis will be reflected to pass through the focus.

