## Focus of a conic section



A conic section can be described as the locus of a point P whose distance PS from a fixed point S is in some fixed ratio e to its perpendicular distance PN from a fixed line.

The point S is called the *focus* of the conic, the fixed line is called the *directrix* of the conic, and the fixed ratio e is called the *eccentricity* of the conic.