

Exercises

E0.1 [1QC] For each point (x, y) of the plane with $x, y > 0$ passes a single ellipses $4x^2 + y^2 = a$ (with $a > 0$). Describe the family of curves that at each point are orthogonal to the ellipse passing through that point. See figure 1.

Solution 1. [1QF]

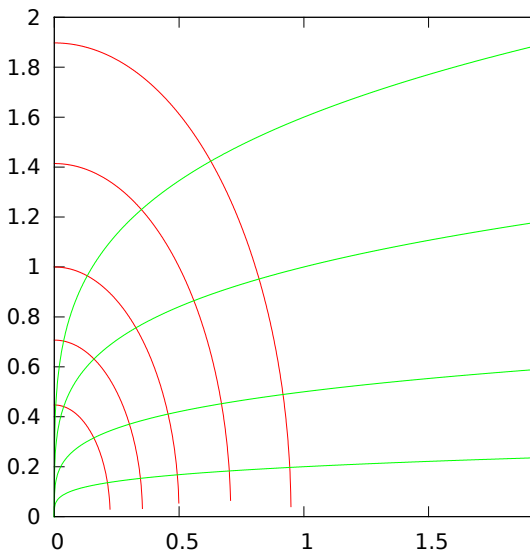


Figure 1: Ellipses (in red) and curves orthogonal to them.