

# Euler spiral

An Euler spiral is a curve whose curvature changes linearly with its curve length. Euler spirals satisfy the condition that the curvature of a circular curve is equal to the reciprocal of its radius.

$$a := \text{curve2d}\left(\text{fresnelsintegralc}\left(\sqrt{2/\pi} \cdot t\right) / \sqrt{2/\pi}, t, -10, 10, 10000\right)$$

$$b := \text{curve2d}\left(\text{fresnelsintegrals}\left(\sqrt{2/\pi} \cdot t\right) / \sqrt{2/\pi}, t, -10, 10, 10000\right)$$

$$c := \text{col2vec}(a, 1)$$

$$d := \text{col2vec}(b, 1)$$

$$e := \text{vec2mat cols}(c, d)$$

