

Figure 38.6: The snowflake curve

Example 38.5. The snowflake curve obtained after 5 iterations is shown in Figure 38.6.

The snowflake curve is an example of a closed curve of infinite length bounding a finite area.

We conclude with another famous example, a variant of the *Hilbert curve*.

Example 38.6. This version of the Hilbert curve is defined by the following four contractions:

$$x' = \frac{1}{2}x - \frac{1}{2},$$

$$y' = \frac{1}{2}y + 1,$$

$$x' = \frac{1}{2}x + \frac{1}{2},$$

$$y' = \frac{1}{2}y + 1,$$

$$x' = -\frac{1}{2}y + 1,$$

$$y' = \frac{1}{2}x + \frac{1}{2},$$

$$x' = \frac{1}{2}y - 1,$$

$$y' = -\frac{1}{2}x + \frac{1}{2}.$$