Sierpiński Curve

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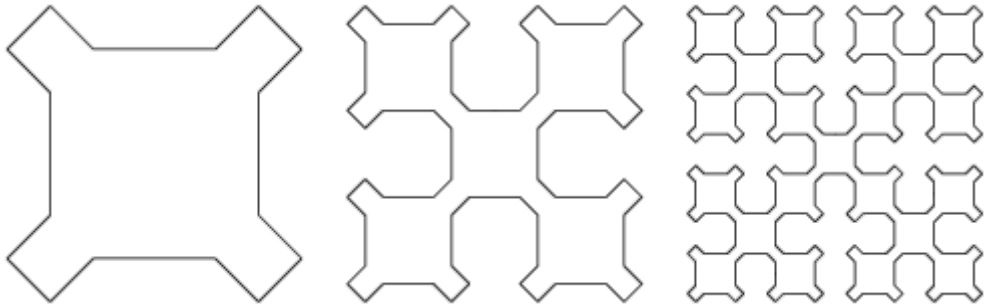
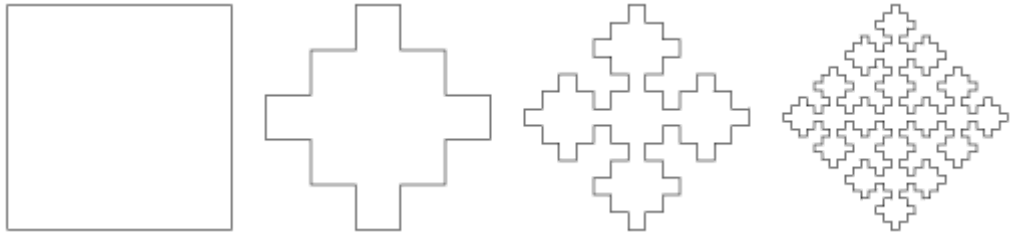
There are several fractal curves associated with Sierpiński.



The area for the first Sierpiński curve illustrated above (Sierpiński curve 1912) is

$$A = \frac{1}{3}\left(7 - 4\sqrt{2}\right).$$

The curve is called the Sierpiński curve by Cundy and Rollett (1989, pp. 67-68), the Sierpiński's square snowflake by Wells (1991, p. 229), and is pictured but not named by Steinhaus (1999, pp. 102-103). The nth iteration of the first Sierpiński curve is implemented in the Wolfram Language as `SierpinskiCurve`[*n*].



The limit of the second Sierpiński's curve illustrated above has area

$$A = \frac{5}{12}.$$

The Sierpiński arrowhead curve is another Sierpiński curve.

SEE ALSO:
Exterior Snowflake, Gosper Island, Hilbert Curve, Koch Antisnowflake, Koch Snowflake, Peano Curve, Peano-Gosper Curve, Sierpiński Arrowhead Curve

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