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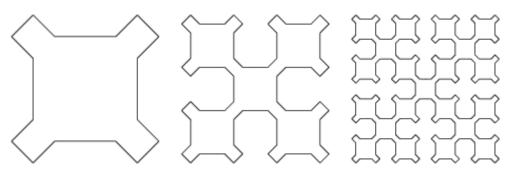
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Created, developed, and nurtured by Eric Weisstein at Wolfram Research Applied Mathematics > Complex Systems > Fractals > Interactive Entries > Interactive Demonstrations >

Sierpiński Curve



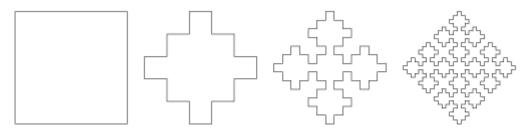
There are several fractal curves associated with Sierpiński.



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 *n*th iteration of the first Sierpiński curve is implemented in the Wolfram Language as SierpińskiCurve[n].



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

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Interactive Wolfram







The Sierpiński arrowhead curve is another Sierpiński curve.

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

SEE ALSO:

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

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Referenced on Wolfram|Alpha: Sierpiński Curve

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