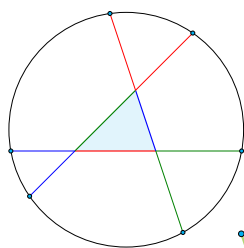


Proofs Without Words

Series 5

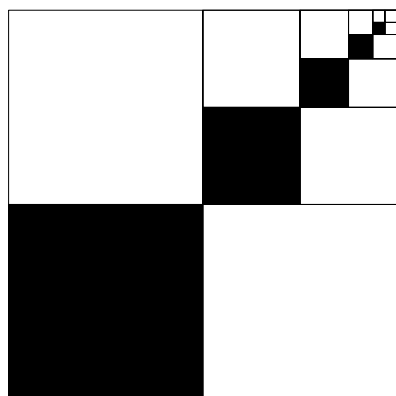
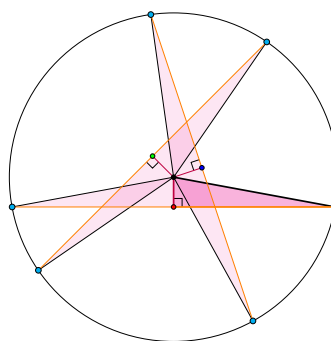
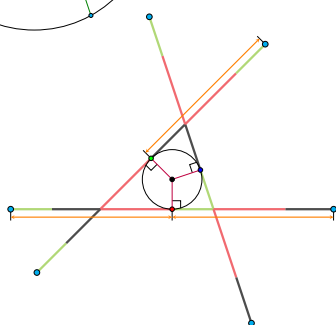
Paul Gartside

(Communicated by Stephan Mirtchev)

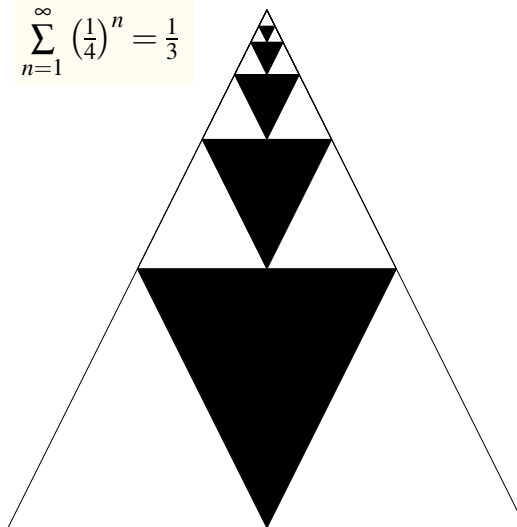


Conway circle theorem.

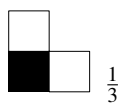
If the sides of a triangle are continued beyond each vertex by a distance equal to the length of the opposite side, the resulting six points lie on a circle.



$$\sum_{n=1}^{\infty} \left(\frac{1}{4}\right)^n = \frac{1}{3}$$



Limits.



$$\frac{1}{3}$$



$$\frac{1}{3}$$

Paul Gartside is a professor of mathematics at the University of Pittsburgh. Their email address is gartside@math.pitt.edu.

© 2026 Gartside. This open-access article is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/).
 Pittsburgh Interdiscip. Math. Rev. is managed by undergraduate students from the University of Pittsburgh and Carnegie Mellon University, and is published electronically through the [University of Pittsburgh Library System](https://pitt.libsys.org/).