

Brown, Morton

A periodic homeomorphism of the plane. (English) [Zbl 0791.58074](#)

West, Thelma (ed.), Continuum theory and dynamical systems. Papers of the conference/workshop on continuum theory and dynamical systems held at Lafayette, LA (USA). New York: Marcel Dekker, Inc.. Lect. Notes Pure Appl. Math. 149, 83-87 (1993).

This short article contains two proofs of a mathematical gem: The homeomorphism of the plane given by $(x, y) \mapsto (|x| - y, x)$ is periodic with period 9!

For the entire collection see [\[Zbl 0777.00054\]](#).

Reviewer: [C.Chicone \(Columbia\)](#)

MSC:

[37C25](#) Fixed points and periodic points of dynamical systems; fixed-point index theory; local dynamics

[Cited in 3 Documents](#)

Keywords:

[periodic homeomorphism](#); [plane](#)