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R Patrick Vernon* (rvernon@tulane.edu), Mathematics Department, Tulane University, 6823 St. Charles Ave., New Orleans, LA. *Preimages Under $f(z) = z^n$ of Continua in the Complex Plane*. Preliminary report.

In this paper, the author addresses two questions posed by David Bellamy. The first question asks whether the preimage (under $f(z) = z^n$) of a hereditarily indecomposable continuum in the plane which is irreducible with respect to separating the origin from ∞ is necessarily hereditarily indecomposable. The second question asks whether a hereditarily indecomposable continuum which properly contains a pseudocircle can have a hereditarily indecomposable preimage. The author discusses answers to these questions, and provides some extensions to these results. (Received September 20, 2006)