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Stephen M. Zemyan* (smz3@psu.edu), Department of Mathematics, Penn State Mont Alto,
Mont Alto, PA 17237-9799. *Sequences and Cycles of Schwarzian Derivatives.*

Let f be analytic in a domain D , and let Sf denote its Schwarzian derivative. For a given initial function f_1 , define a sequence of meromorphic functions by $f_{n+1} = Sf_n$. We produce examples of constant sequences and 2-cycles, i.e., pairs of analytic functions for which $Sf_1 = f_2$ and $Sf_2 = f_1$. We also show how to generate n -cycles for each positive integer n and present methods for representing cycle elements. (Received September 20, 2007)