

Length-7 Prime Chains under the Collatz Map

Hiroshi Harada

February 19, 2026

A research note on prime-generating behavior in the Collatz map

$$f(x) = (3x + 1)/2$$

The following length-7 chain was identified:

$$x_0 = 89599$$

$$x_1 = 134399$$

$$x_2 = 201599$$

$$x_3 = 302399$$

$$x_4 = 453599$$

$$x_5 = 680399$$

$$x_6 = 1020599$$