# University of Colorado Department of Mathematics 

## Problem of the Month

## March 2013

Find all continuously differentiable functions $f: \mathbb{R} \rightarrow \mathbb{R}$ having the property that for every integer $n$ and every odd integer $a$ there is an odd integer $b$ such that $f\left(\frac{a}{2^{n}}\right)=\frac{b}{2^{n}}$.

