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Melvyn B. Nathanson* (melvyn.nathanson@lehman.cuny.edu), Dept. of Mathematics,
Lehman College (CUNY), Bronx, NY 10468. *On the fractional parts of roots of positive real
numbers.*

Let $[\theta]$ denote the integer part and $\{\theta\}$ the fractional part of the real number θ . For $\theta > 1$ and $\{\theta^{1/n}\} \neq 0$, define $M_\theta(n) = [1/\{\theta^{1/n}\}]$. The arithmetic function $M_\theta(n)$ is eventually increasing, and $\lim_{n \rightarrow \infty} M_\theta(n)/n = 1/\log \theta$. Moreover, $M_\theta(n)$ is “linearly periodic” if and only if $\log \theta$ is rational. Other results and problems concerning the function $M_\theta(n)$, including connections with continued fractions, are discussed. (Received September 24, 2012)