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We investigate the limiting behavior associated with the specific model, as proposed by previous researchers, of a discrete unitary quantum walk (QW) on the set of non-negative integers. For every position node $x=0, 1, 2, 3, \dots$, as time t approaches infinity, we derive the probability $p(x)$ of finding the particle at x . Moreover, we specify explicitly the behavior of the weak limit of $X_{\{t\}}/t$. (Received September 19, 2012)