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Lenny Jones* (lkjone@ship.edu), Department of Mathematics, Shippensburg University, 1871 Old Main Drive, Shippensburg, PA 17257. *Appending Digits to Generate an Infinite Sequence of Composite Numbers I.*

Let $d \in \{0, 1, \dots, 9\}$, and let k be a positive integer. We generate an infinite sequence $\{s_n\}_{n=1}^{\infty}$ of positive integers by repeatedly appending the digit d on the right of k . For example, if $k = 35$ and $d = 1$, then the sequence $\{s_n\}_{n=1}^{\infty}$ is:

$$s_1 = 351, \quad s_2 = 3511, \quad s_3 = 35111, \quad s_4 = 351111, \dots$$

For each value of d , we investigate when there exist infinitely many positive integers k such that every term of the sequence $\{s_n\}_{n=1}^{\infty}$ is composite. (Received September 16, 2010)