1151-05-218 **Steven J. Tedford*** (stedford@misericordia.edu). *A Combinatorial Approach to the Padovan Numbers.*

Similar to the Fibonacci Numbers, the Padovan Numbers can be defined recursively: $P_{-1} = 0$, $P_0 = P_1 = P_2 = 1$; $P_n = P_{n-2} + P_{n-3}$ for $n \geq 3$. Identities for these numbers have been discovered and proved using a variety of methods including matrix methods. By considering the number of ways a strip of squares can be tiled using dominoes and triominoes, we show that the Padovan Numbers can be considered combinatorially. Finally, we consider some of the known identities for these numbers and give combinatorial proofs of these identities. (Received August 19, 2019)