1106-VN-897 **Sarah Hanusch*** (sh1609@txstate.edu), Department of Mathematics, Texas State University, 601 University Drive, San Marcos, TX 78666. *Counting the isomorphism classes of the generalized Petersen graphs.*

The generalized Petersen graphs are a family of graphs with two positive integer parameters n and k, where $k < n$. The graph $GP(n, k)$ contains $2n$ vertices $u_0, u_1, \ldots, u_{n-1}$ and $v_0, v_1, \ldots, v_{n-1}$, and $3n$ edges u_iu_{i+1}, u_iv_i and v_iv_{i+k} where all indices are considered $\mod n$. Results from number theory and graph theory are combined to count the isomorphism classes of the generalized Petersen graphs for each value of $n \geq 5$. (Received September 08, 2014)