1145-11-1426 **Robert M. Sulman*** (sulmanrm@oneonta.edu). *Linear Functions (modulo n) and Associated Algebraic Structure.* Preliminary report.

We consider linear maps f(x) = ax+b (mod n) and explore the variety of orbit graphs produced. These graphs will sometimes have "whiskers" (when gcd(a,n)>1), although these whisker structures will be much simpler than those found in quadratic orbits (mod n), which will be seen in several examples as well. We will also see symmetry in the distribution of inverse-pairs (in orbit graph) among the units of the ring of integers modulo n. Finally, we examine the groups whose elements are linear maps (mod n). (Received September 24, 2018)