1077-11-626 erica j. Whitaker* (ewhitaker@math.ohio-state.edu). Congruence and Noncongruence Subgroups of $\Gamma(2)$ via Graphs on Surfaces.

There is an established way to associate a finite-index subgroup of $\Gamma(2)$ with a bipartite graph on a surface, or, equivalently, a triple of permutations. We will examine this relationship, and find permutations and graphs for groups of the form $\Gamma(2p)$. We will also use graphs to produce infinite families of noncongruence subgroups of every even level. (Received September 08, 2011)