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O Yayenie* (omer.yayenie@murraystate.edu), Faculty Hall 6C, Department of Mathematics & Statistics, Murray State University, Murray, KY 42071. *Subgroups Of Some Fuchsian Groups Defined By Two Linear Congruences.*

In this article we define a new family of subgroups of Fuchsian groups $\mathcal{H}(\sqrt{m})$, for squarefree positive integer m , and calculate their index in $\mathcal{H}(\sqrt{m})$ and their parabolic class number. Moreover, we will show that the index of these subgroups is closely related with the solvability of a quadratic congruence $x^2 \equiv m \pmod{n}$ and the number of inequivalent solutions to a quadratic congruence $x^2 \equiv 1 \pmod{n}$. (Received September 07, 2007)