## MATH 521B: Abstract Algebra

Quiz 5

Let $G=S_{4}$. Set $K \leq G$, defined as $K=\left\langle\left(\begin{array}{llll}1 & 2 & 3 & 4\end{array}\right)\right\rangle$. Set $a=\left(\begin{array}{ll}1 & 2\end{array}\right) \in G$. Calculate $[a]=\{b \in G: a \equiv b(\bmod K)\}$.

