The classification of fixed points of linear 2-D maps, where trace $\tau=\lambda_{1}+\lambda_{2}$ and determinant $\Delta=\lambda_{1} \lambda_{2}$ are determined by $2 \times 2$ system matrix $A$. Iterates of the map are determined by $\vec{x}_{n}=A^{n} \vec{x}_{0}$ where $n$ is the number of iterates taken and $\vec{x}_{0}=\left(x_{0}, y_{0}\right)^{T}$ is the initial condition.


