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 2×2 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 $\vec{x}_0 = (x_0, y_0)^T$ is the initial condition.

