

#flo

1 | Flo

1.1 | Thought Processes

- As geometric transformations
- As algebraic transformations

1.2 | Examples

$\begin{pmatrix} x & 0 \\ 0 & y \end{pmatrix}$ | Scale by x and y $\begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix}$ | Rotate -90deg (easier to visualize geometrically, also two reflections (over $y = x$ and $y = 0$)) $\begin{pmatrix} 1 & 1 \\ 0 & 1 \end{pmatrix}$ | Add y to x (easier to visualize algebraically, also a shear)

1.3 | Related

- KBe2020math530retPracticeMultiplyMatrixIdentfyGroups

2 | Rotation Matrices

- We can get 90deg rotations decently easily, but what about other angles?