0.1 Endomorphisms as group actions

We can view each member of the group g as a homomorphim on s.

Where s is a vector space V, the representation on each group member is an invertible square matrix.

If the set we use is the vector space V, then we can represent each group element with a square matrix acting on V.

Faithful means ab holds for repesentation too.

Representation theory. groups defined by ab=c. if we can match each eleemnt to amatrix where this holds we have represented the matrix.