

NOTES

DEVANSH TRIPATHI

ABSTRACT. This is the collection of various techniques that I encounter while doing math.

For construction of injection. If there exists a surjection from set $A \rightarrow B$ then to construct injection from $B \rightarrow A$, for each $b \in B$ there will exist at least a $a \in A$ such that $f(a) = b$ (because of surjection). Then take $\min\{a \in A : f(a) = b\}$ and map b to that minimum element of A . This will result in an injection.