

Introducing elements [objects] in proofs

When elements appear in a proof, they need to be introduced so that readers understand how to interpret them and/or any properties that might be attached to them.

For example, if an element, say x , is generic, then it should be introduced before you refer to it in any part of your proof. Standard introductory phrases would be “Fix x in G ...” or “Consider x in G ”

If y is a particular element, then introduce it as such: “For some y in G , we know ...” or “There is a y in G with”

In either case, the reader will have an understanding of the elements [or any other kind of objects] being introduced instead of trying to figure out how to interpret their presence from the context of your argument.