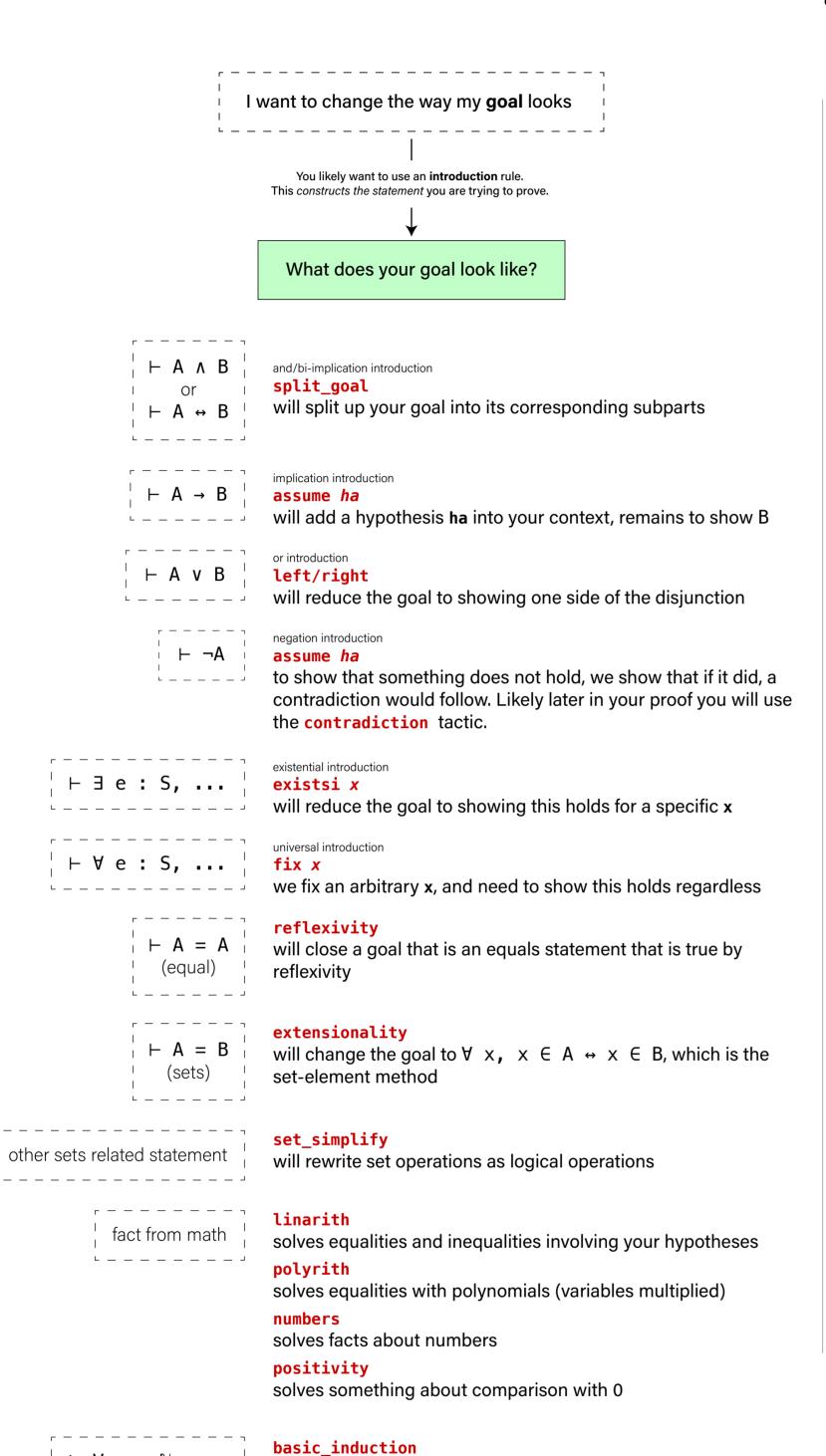
a flowchart of which tactics to use and when to use them



inducts on your goal with standard induction, splits goal into a

inducts on your goal with strong induction, splits goal into a base case and inductive step where your inductive hypothesis

inducts on your goal with standard induction, splits goal into a base case and inductive step, except the base case starts at c

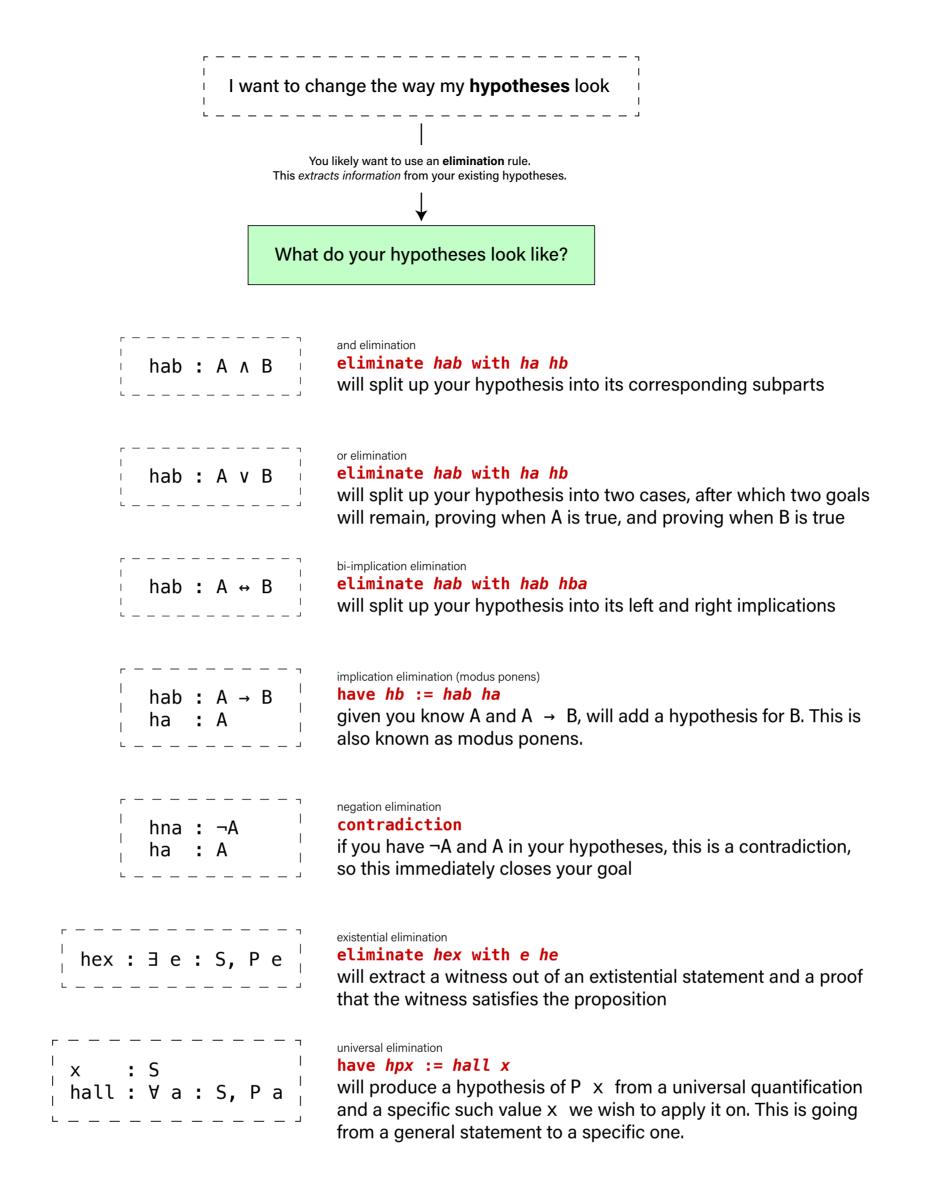
base case and inductive step

is in the form \forall m < n, P m

induction_from_starting_point

strong_induction

 $\vdash \forall n : \mathbb{N}, n \geq c \rightarrow \dots$



I hope to utilize a definition or equality

dsimp definition

will unfold a definition in your goal. For example, **dsimp dvd** will apply the definition of "divides".

rewrite *hmn*

if hmn: m = n, this will replace all m with n in your goal. To do the other direction, use rewrite $\leftarrow hmn$

If you want to use these on a definition on a hypothesis, say h, you should add at h at the end of the tactic, like rewrite hmn at h or dsimp definition at h

My goal is literally a hypothesis (I'm done!)

assumptio

will close your goal! check if you have any additional goals that remain to be shown