➔ Introduction

It may help to think of this less as a 'rule', and more as a *procedure*. If you know you want to derive a conditional (i.e., you know you want to *introduce* an arrow), then you'll need to do the following

    i.   Establish the *antecedent* of your target conditional as an **assumption** (in other words, assume the antecedent)

    ii.   Arrive at the *consequent* of your target conditional at any other line (in other words, derive the consequent)

    iii.   Conclude your target conditional. ***Cite the line number where the consequent occurs, and discharge the assumption where the antecedent occurs***

Ex: PvQ I- ~P->Q

1   (1)   PvQ   A

2   (2)   ~P   A   *Notice that this is the antecedent of your target conditional*

1,2   (3)   Q   1,2 vE

1   (4)   ~P->Q   2 -> I (1)

RAA

It may help to think of this less as a 'rule', and more as a *procedure*. RAA allows you to either introduce a ~, or take one away. It's like ~I and ~E rolled into a single rule. To do it, you'll typically begin by identifying your target sentence. Consider the following sequent:

P |- ~~P

We know what our target sentence is pretty quickly here: It's the conclusion ~~P. Given this, we can use RAA by following a three-step procedure:

   i.   Assume the *denial* of the target sentence (in this case, ~P)
   ii.   Derive a *contradiction* (any two sentences where one is the denial of the other)
   iii.   Conclude the target sentence. **Cite** the two contradicting lines, and **discharge** the
           assumption from step (i.)

Ex: P |- ~~P

1   (1)   P

2   (2)   ~P   A   *Notice that this is the denial of your target sentence*

1   (3)   ~~P   1,2 RAA (2)   *Notice that this sentence is the denial of the assumption that*

                                        we're discharging