(b)

1	(1)	R	A
2	(2)	P	A
1	(3)	$P \rightarrow R$	$1 \rightarrow$I (2)

(c)

1	(1)	P	A
	(2)	$P \rightarrow P$	$1 \rightarrow$I (1)

arrow-elim Given a conditional sentence (at line *m*) and another sentence that is its antecedent (at line *n*), conclude the consequent of the conditional.

Annotation: ***m, n*** **$\rightarrow$E**
Assumption set: The union of the assumption sets at lines *m* and *n*.
Comment: The order of *m* and *n* in the proof is irrelevant.
Also known as: Modus Ponendo Ponens (MPP), Modus Ponens (MP), Detachment, Affirming the Antecedent.

Example.

1	(1)	$P \rightarrow Q$	A
2	(2)	P	A
1,2	(3)	Q	1,2 $\rightarrow$E