Modus ponens is a fundamental inference rule in propositional logic.

If we know P is true and P implies Q, we can conclude Q is true.

$$\frac{\mathbb{P} \quad \mathbb{P} \Rightarrow Q}{Q}\ \text{modus ponens}$$

The horizontal line (generated by —) separates premises from conclusion.

The label in brackets appears to the right of the conclusion.

Here's a more complex example with multiple premises:

$$\frac{\mathbb{P} \Rightarrow Q \quad Q \Rightarrow R \quad \mathbb{P}}{R}\ \text{chain of implications}$$

We can also use INFRULE without labels:

$$\frac{A \wedge B}{A}\ \text{conjunction elimination}$$