

## Theorema 2.0: A First Tour

### Tma2tex-parsing Info/Legend

- ◆ Yellow: Represents entry points to parsing.
- ◆ Orange: Helper Definitions were defined in the Theorema Notebook interface, but are directly included in the following formula.
- ◆ Red: Matches unspecified cells or generic content.
- ◆ Blue: Represents lists of specific content.
- ◆ Purple: Used for lists of generic cells.
- ◆ Green: Represents grouped data cells.

◆◆◆Null◆

We consider “proving”, “computing”, and “solving” as the three basic mathematical activities.

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## 1 Proving

We want to prove

$$(\forall_x (P[x] \vee Q[x])) \wedge (\forall_y (P[y] \Rightarrow Q[y])) \Leftrightarrow (\forall_x Q[x]).$$

♦ **Proposition : FIRST TEST, 2014**  
 $((\forall x (P[x] \vee Q[x]) \wedge \forall y (P[y] \rightarrow Q[y])) \iff \forall x Q[x])$

◆ **Definition : LEXICAL ORDERING**


**Definition : MONOMIALS**

◆ **Definition : SUBSET**

♦♦ Proposition : TRANSITIVITY OF

